Health and Social Service Manpower In Alberta, 1983

Alberta

HEALTH AND SOCIAL SERVICES
DISCIPLINES COMMITTEE

35-1800/

HEALTH AND SOCIAL SERVICE MANPOWER IN ALBERTA, 1983

Alberta Health and Social Services
Disciplines Committee
c/o Alberta Social Services and
Community Health
Seventh Street Plaza - South Tower
10030 - 107 Street
Edmonton, Alberta T5J 3E4

FOREWORD

Health and Social Service Manpower in Alberta, 1983 provides basic information and statistical data on thirty-five health and social service occupational groups in Alberta. This report is produced on behalf of the Alberta Health and Social Services Disciplines Committee by the Department of Social Services and Community Health.

The Alberta Health and Social Services Disciplines Committee is a provincial government interdepartmental body consisting of a non-governmental Chairman and representatives from the Departments of Advanced Education, Hospitals and Medical Care, Manpower, and Social Services and Community Health. It has two main roles:

1. To advise the Ministers and Deputy Ministers of the four departments on important health and social service manpower issues; and

2. To co-ordinate the four departments' manpower research and planning activities in the health and social service areas.

In addition to publishing Health and Social Service Manpower in Alberta on an annual basis, the Committee also produces an Annual Report, which describes its major activities during each fiscal year, and summary reports based on its surveys of employers of health and social service personnel in the province.

The Committee wishes to thank the various health and social service professsional associations and licensing bodies which generously provided much of the information contained in this publication.

Elvin A. Christenson, F.C.A.

Chairman, Alberta Health and Social
Social Services Disciplines Committee

Table of Contents

Page

Introduction 1
Highlights by Occupational Group 9
Map of Alberta Census Divisions 10
Audiologists and Speech Pathologists 11
Biomedical Engineers 17
Child Care Workers 23
Chiropractors 29
Combined Laboratory and X-Ray Technicians 35
Dental Assistants 41
Dental Hygienists 47
Dental Technicians 53
Dentists 59
Denturists 67
Dietary Technicians 73
Dietitians/Nutritionists 79
Emergency Medical Technicians - Paramedic 85
Health Record Administrators 91
Health Record Technicians 97
Medical Laboratory Technologists 103
Occupational Therapists 111
Ophthalmic Dispensers 117
Optometrists 123
Pharmacists 129
Pharmacy Assistants 137
Physicians 143
Physiotherapists 153
Podiatrists 159
Prosthetists and Orthotists 165
Psychiatric Nurses 169

Page

Psychologists 177

Public Health Inspectors 185

Radiological Technicians 191

Recreational Therapists 199

Registered Nurses 205

Registered Nursing Assistants 221

Rehabilitation Practitioners 229

Respiratory Technologists 235

Social Workers 241

INTRODUCTION

BACKGROUND

This is the sixth in a series of annual publications on health and social service manpower in Alberta. This report contains information and statistical data on thirty-five health and social service occupations. The information provided includes: functional definitions, information concerning professional associations, licensing bodies, and legislation, number of practitioners by location, changes in the number of personnel since 1981, number of students in and graduates from health and social service training programs in Alberta, and continuing education programs.

OCCUPATIONS INCLUDED IN REPORT

The following thirty-five health and social service occupations are included in this report:

1. Audiologists/Speech Pathologists
2. Biomedical Engineers
3. Child Care Workers
4. Chiropractors
5. Combined Laboratory and X-Ray Technicians
6. Dental Assistants
7. Dental Hygienists
8. Dental Technicians
9. Dentists
10. Denturists
11. Dietary Technicians
12. Dietitians/Nutritionists
13. Emergency Medical Technicians - Paramedic
14. Health Records Administrators
15. Health Records Technicians
16. Medical Laboratory Technologists
17. Occupational Therapists

18. Ophthalmic Dispensers
19. Optometrists
20. Pharmacists
21. Pharmacy Assistants
22. Physicians
23. Physiotherapists
24. Podiatrists
25. Prosthetists and Orthotists
26. Psychiatric Nurses
27. Psychologists
28. Public Health Inspectors
29. Radiological Technicians
30. Recreational Therapists
31. Registered Nurses
32. Registered Nursing Assistants
33. Rehabilitation Practitioners
34. Respiratory Technologists
35. Social Workers

Two criteria were used to decide whether or not to include an occupation in this publication: it should be legislatively recognized and/or have a formal training program in Alberta. However, because of time constraints and limitation of resources, it was not possible to collect data on all such health and social service manpower groups. Nonetheless, it is the hope of the Alberta Health and Social Services Disciplines Committee that data collection efforts will be sufficiently increased in the future to include all major health and social service occupations.

Information on the geographic distribution of personnel in this report is based on census divisions, with separate statistical data for the Census Metropolitan Areas of Edmonton and Calgary and, in some cases, for cities and towns. Census divisions are used by many government agencies and non-government organizations as the primary geographical units for statistical purposes. The numbers of personnel in the Census Metropolitan Areas of Edmonton and Calgary are presented separately from their respective census divisions to give a better idea of the urban and non-urban distribution of personnel within these census divisions.[1] A map of the census divisions in Alberta is shown on Page 10.

The 1983 manpower data appearing in this publication are as of December 31, 1983, except where noted.

INFORMATION SOURCES

The principal sources of information reported in this publication are:

1. The 1980 revised edition of the Canadian Classification and Dictionary of Occupations;
2. Existing provincial legislation regulating the various manpower groups;
3. Provincial professional associations or licensing bodies for 33 health and social service manpower groups (two manpower groups have no professional associations or licensing bodies);
4. Surveys of employers of health and social service personnel conducted by the Alberta Health and Social Services Disciplines Committee; and
5. The Alberta Health and Social Service Training Program Inventory, 1982-83.

The Canadian Classification and Dictionary of Occupations is the source of many of the functional definitions appearing in this publication. In a few cases definitions were obtained from professional legislation or other sources. Information on legislation was obtained from existing Acts governing these occupational groups.

---

[1] The Census Metropolitan Area of Edmonton includes the City of Edmonton, the City of St. Albert, the towns of Bon Accord, Fort Saskatchewan, Gibbons, Morinville and Redwater, the village of Legal, the municipal district of Sturgeon #90 and the county of Strathcona #20. The Census Metropolitan Area of Calgary includes the City of Calgary.

Most of the personnel data appearing in the report were obtained from professional associations or licensing bodies, particularly in cases in which registration with a professional association or licensing body was mandatory. A survey of professional associations and licensing bodies was conducted by the Alberta Health and Social Services Disciplines Committee in December 1983. However, for those groups for which registration was voluntary, the number of personnel registered could represent only a fraction of the actual number of practising personnel. For these groups, surveys of employers of health and social service personnel were used, if possible, as alternative sources of data. These surveys were carried out on behalf of the Alberta Health and Social Services Disciplines Committee by the Department of Social Services and Community Health.

The Alberta Health and Social Service Training Program Inventory, 1982-83, published on behalf of the Alberta Health and Social Services Disciplines Committee by the Health and Social Service Programs Branch, Department of Advanced Education, is the source of the report's information on basic education programs.

DATA LIMITATIONS

Manpower data supplied by the professional associations and the surveys of employers of health and social service personnel have a number of limitations:

1. Some registries include members who are not active in Alberta. In most instances out-of-province members were excluded for the purpose of this publication, but this was not feasible in some cases.

2. For those occupational groups where registration or licensure is not required in order to practice, registration figures generally underestimate the number of practitioners. The surveys of employers of health and social service personnel were used as an alternative source of data, but in certain cases this was not feasible. Generally speaking, registration data from professional associations or registration bodies, for groups requiring mandatory registration, provide manpower information about the potential number of personnel in the province. Manpower statistics from

the surveys of employers, on the other hand, reflect the actual number of personnel practicing at the time of the surveys.

3. While every effort was made to ensure the comprehensiveness of the surveys of employers of health and social service personnel, some employers may have been missed.

MANPOWER SITUATION IN 1983

In 1979 the Department of Social Services and Community Health began to conduct semi-annual surveys of employers of health and social service personnel in Alberta on behalf of the Alberta Health and Social Services Disciplines Committee. Ten manpower surveys have been conducted, two in each year from 1979 to 1982. Starting in 1983, with the exception of hospitals and nursing homes, the survey of employers of health and social service personnel was carried out on an annual basis instead of on a semi-annual basis. There are three major objectives for these surveys:

1. To monitor on a regular basis the current supply of and demand for health and social service personnel in the province;

2. To provide employers and the provincial government with an "early warning" system for discovering manpower shortages and problems of geographic mal-distribution; and

3. To provide information to enable Alberta to gear its health and social service manpower training programs to produce the numbers and types of personnel to meet the service needs of the province.

The Committee's tenth employer survey was conducted on September 30, 1983. Data were collected on 69 occupational groups from over 3,800 employing agencies, with a response rate of 99.8 percent.

As of September 30, 1983 there were 45,592 established "full-time equivalent" positions[1] for health and social service personnel in the employing agencies surveyed. At the time there were 1,343 vacant "full-time equivalent" positions, representing an average vacancy rate of 2.9 percent. The reported average turnover rate over the preceding twelve months was 11.0 percent.

As of September 30, 1983 the manpower groups experiencing the highest vacancy rates were:

1. Community Youth Workers (11.3%);
2. Rehabilitation Counsellors/Practitioners (7.7%);
3. Occupational Therapy Assistants/Aides (7.3%);
4. Dental Hygienists (7.0%);
5. Physiotherapists (6.4%);
6. Occupational Therapists (6.1%);
7. Ultrasound Technicians (6.0%); and
8. Recreational Therapy Assistants/Aides (5.6%)

The manpower groups with the highest rates of turnover between October 1, 1982 and September 30, 1983 were:

1. Social Service Aides (20.8%);
2. Nuclear Medicine Technicians (20.4%);
3. Rehabilitation Counsellors/Practitioners (19.1%);
4. Homemakers (19.1%);
5. Physiotherapists (17.4%);
6. Respiratory Technologists (16.9%);
7. Houseparents (15.8%);
8. Dental Assistants (15.6%); and
9. Medical Laboratory Assistants/Aides (15.5%).

---

[1] This number does not necessarily reflect the number of persons actually employed. Two or more part-time personnel often fill one full-time position. In addition, the number of "full-time equivalent" positions also includes vacancies.

TRAINING PROGRAMS

In 1982-83 Alberta had a total of 120 formal post-secondary educational programs for health and social service personnel. These training programs were provided by 25 post-secondary educational institutions, hospitals, and cancer treatment centres in the province.

The Department of Advanced Education publishes an annual report entitled Alberta Health and Social Service Training Program Inventory. The 1982-83 edition of this publication contained the following information on health and social service manpower training programs in Alberta:

1. Locations and length of training programs;
2. Number of applicants;
3. First-year enrolment quotas;
4. Actual enrolments; and
5. Number of graduates.

Readers who wish to obtain more information on training programs should consult this publication.

FORMAT OF THE PUBLICATION

The format of this publication closely follows the format of previous publications. Following this introduction, there are separate chapters on each of the 35 occupational groups. Each chapter is divided into four sections:

1. An overview section which includes a functional definition of and statistical highlights on the occupational group;

2. A section on professional association and legislation;

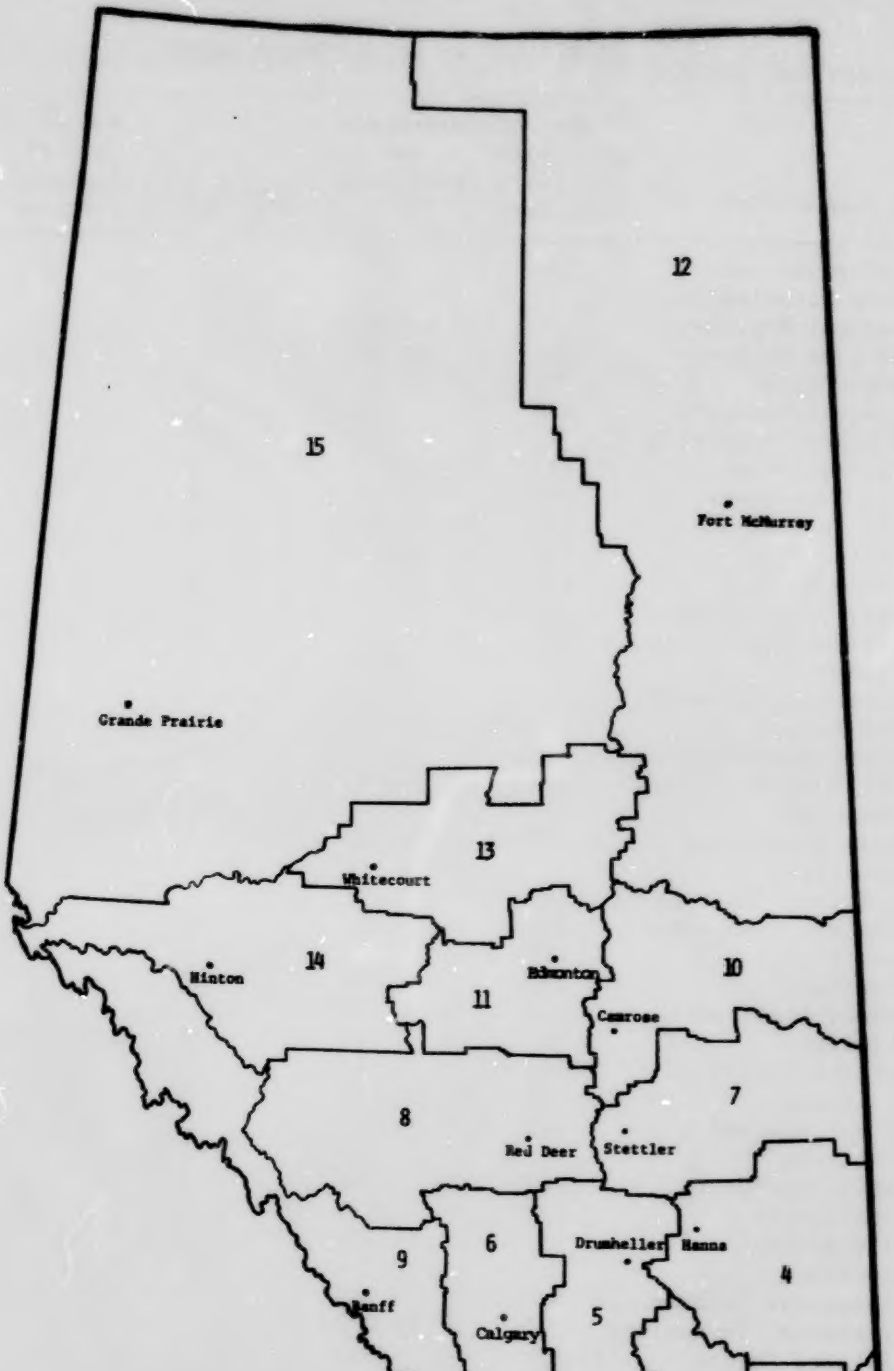
3. A section on personnel data including number and geographic distribution of personnel in the province; and

4. A section on educational programs including both basic and continuing education.

The chapters on dentists, physicians, and registered nurses contain additional information on personnel practicing in specialty areas.

HIGHLIGHTS BY OCCUPATIONAL GROUP

	Number of Registered/ Practicing Personnel	Personnel-to-Population Ratio	Legislation	Number of Alberta Training Programs	Number of Alberta Graduates
Audiologists and Speech Pathologists	330	1: 7,701		1	22
Biomedical Engineers	28	1: 84,161		3	3
Child Care Workers	1,124	1: 2,097		2	35
Chiropractors	291	1: 8,098	X	-	-
Combined Laboratory and X-Ray Technicians	239	1: 9,860	X	1	22
Dental Assistants	1,795	1: 1,313	X	2	101
Dental Hygienists	503	1: 4,685	X	1	39
Dental Technicians	148	1: 15,922	X	1	8
Dentists	1,138	1: 2,071	X	1	48
Denturists	155	1: 15,203	X	1	9
Dietary Technicians	245	1: 9,618		2	40
Dietitians/Nutritionists	330	1: 7,140	X	1	27
Emergency Medical Technicians-Paramedic	240	1: 9,819		2	57
Health Record Administrators	144	1: 16,365		1	12
Health Record Technicians	319	1: 7,387		1	16
Medical Laboratory Technologists	1,928	1: 1,222		3	111
Occupational Therapists	315	1: 7,481		1	40
Ophthalmic Dispensers	277	1: 8,507	X	-	-
Optometrists	197	1: 11,962	X	-	-
Pharmacists	1,816	1: 1,298	X	1	97
Pharmacy Assistants	332	1: 7,098		1	24
Physicians	3,315	1: 711	X	2	186
Physiotherapists	669	1: 3,522	X	1	56
Podiatrists	18	1:130,917	X	-	-
Prosthetists and Orthotists	25	1: 94,260		-	-
Psychiatric Nurses	701	1: 3,362	X	2	49
Psychologists	1,170	1: 2,014	X	8	91
Public Health Inspectors	135	1: 17,456	X	-	-
Radiological Technicians	871	1: 2,706	X	4	68
Recreational Therapists	150	1: 15,710		1	7
Registered Nurses	17,770	1: 133	X	27	897
Registered Nursing Assistants	7,355	1: 320	X	3	316
Rehabilitation Practitioners	1,331	1: 1,770		8	152
Respiratory Technologists	289	1: 8,154		2	43
Social Workers	2,202	1: 1,070	X	5	251


12
15
Fort McMurray
Grande Prairie
13
Whitecourt
14
Hinton
11
Edmonton
10
Camrose
7
8
Red Deer
Stettler
6
9
Drumheller
Hanna
4
Banff
Calgary
5
2
3
Lethbridge
Medicine Hat
Pincher Creek
1

ALBERTA CENSUS DIVISIONS
1983

AUDIOLOGISTS AND SPEECH PATHOLOGISTS

I. OVERVIEW

Definition: Audiologists

Provide diagnostic evaluation and rehabilitative services and conduct research related to hearing. Administer air and bone conduction and other audiometric tests and examinations to determine hearing efficiency. Coordinate audiometric results with medical, social, behavioural and other diagnostic data. Evaluate total response pattern and acoustic tests to differentiate between organic and non-organic hearing loss. Plan, direct and participate in counselling, speech-reading and other rehabilitation programs. Act as consultants to educational, medical and other professional groups. Conduct research in physiology, pathology, biophysics and psychophysics of auditory system, if required. Design and develop clinical and research procedures and apparatus, if required.

(Source: No. 3137, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Speech Pathologists

Diagnose and treat speech, language and voice disorders and perform related research. Administer tests and observe patient to diagnose nature of disorder and to evaluate degree of impairment. Plan and conduct remedial exercises and programs to correct stuttering, abnormal articulation and other disorders. Provide speech training for patient with communication problems caused by cerebral palsy, surgical removal of larynx, hearing deficiencies or other impairments. Plan individual or group therapy in rehabilitation of communication disorders. Counsel and guide language-handicapped individuals and their families, teachers or employers. Act as consultants to educational, medical, dental and other professional groups. Conduct research related to development of diagnostic and treatment techniques and procedures or design of apparatus.

(Source: No. 3137, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Speech and Hearing Association of Alberta is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 24 audiologists and 306 speech pathologists practicing in Alberta[1]. About 73 percent of these personnel were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial audiologist-to-population ratio was 1:98,188 and provincial speech pathologist-to-population ratio was 1:7,701 in 1983.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Speech and Hearing Association of Alberta
Box 8173, Station "F"
Edmonton, Alberta
T6H 4P1

President: Mrs. Sara McClain

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating audiologists and speech pathologists.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

III. PERSONNEL DATA

TABLE 1A NUMBER OF AUDIOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	56,900	-
2 (Lethbridge)	1	115,000	1:115,000
3 (Pincher Creek)	0	36,700	-
4 (Hanna)	0	12,400	-
5 (Drumheller)	0	39,300	-
6 (Calgary)[3]	0	96,508	-
7 (Stettler)	0	40,500	-
8 (Red Deer)	0	129,700	-
9 (Banff)	0	22,900	-
10 (Camrose)	0	80,100	-
11 (Edmonton)[4]	0	121,444	-
12 (Fort McMurray)	0	88,500	-
13 (Whitecourt)	0	55,100	-
14 (Hinton)	0	26,200	-
15 (Grande Prairie)	0	132,500	-
Census Metropolitan Area of Edmonton	16	682,056[5]	1: 42,629
Census Metropolitan Area of Calgary	7	620,692[5]	1: 88,670
PROVINCIAL TOTAL	24	2,356,500	1: 98,188

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 1B NUMBER OF SPEECH PATHOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	56,900	1: 6,322
2 (Lethbridge)	15	115,000	1: 7,667
3 (Pincher Creek)	2	36,700	1:18,350
4 (Hanna)	1	12,400	1:12,400
5 (Drumheller)	2	39,300	1:19,650
6 (Calgary)[3]	3	96,508	1:32,169
7 (Stettler)	2	40,500	1:20,250
8 (Red Deer)	12	129,700	1:10,808
9 (Banff)	2	22,900	1:11,450
10 (Camrose)	5	80,100	1:16,020
11 (Edmonton)[4]	14	121,444	1: 8,675
12 (Fort McMurray)	7	88,500	1:12,643
13 (Whitecourt)	4	55,100	1:13,775
14 (Hinton)	3	26,200	1: 8,733
15 (Grande Prairie)	7	132,500	1:18,929
Census Metropolitan Area of Edmonton	133	682,056[5]	1: 5,128
Census Metropolitan Area of Calgary	85	620,692[5]	1: 7,302
PROVINCIAL TOTAL	306	2,356,500	1: 7,701

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	273[1]	285[2]	330[3]
% Change in Number of Practicing Personnel	29.4%	4.4%	15.8%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratio:			
- Alberta	1: 8,197	1: 8,150	1: 7,141
- Western Canada[5]	1:13,570	-	1: 9,307
- Canada[6]	1:15,011	1:13,703	-

[1] Source: "September 30, 1981 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Manitoba Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The British Columbia figures refer to personnel who are registered and practicing (registration for audiologists and speech pathologists in B.C. is not compulsory). The Saskatchewan and Alberta figures refer to practicing personnel, while the Manitoba figure refers to personnel registered with their association.

[6] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a baccalaureate degree program in speech pathology and audiology. The program is four years in length including one pre-professional year. There were 22 graduates from the program in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAM FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
University of Alberta (Length of program: 4 years)			
Enrolments:			
1st Year	Pre-Professional Yr	Pre-Professional Yr	Pre-Professional Yr
2nd Year	25	25	30
3rd Year	26	23	25
4th Year	26	26	23
Graduates:	22	28	22

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs:

There were no continuing education programs offered by educational institutions in Alberta in 1983. However, the Continuing Education Committee of the Speech and Hearing Association of Alberta held a two-day workshop and four single-evening seminars, in addition to their annual three-day convention.

BIOMEDICAL ENGINEERS

I. OVERVIEW

Definition: "Biomedical Engineering - usually either graduate engineers, mostly in electrical engineering with graduate training and experience in the biomedical sciences; or graduate engineers working in the field of Biomedical Engineering. Can play the following roles: provide engineering supervision of the technical staff, manage educational programs for others in the staff, efficient use of equipment, provide engineering consultation, improvement or innovative design of equipment, conduct research."[1]

(Source: B. Leung; Development in Biomedical Engineering in Canada - Manpower and Governmental Activities, Health Manpower Directorate, Department of National Health and Welfare; Ottawa; 1973; pp. 2-3)

In 1983 there were 28 biomedical engineers registered with the Canadian Medical and Biological Engineering Society in Alberta.[2] About 86 percent of the biomedical engineers were residing in the Census Metropolitan Areas of Edmonton and Calgary. The biomedical engineer-to-population ratio for Alberta was 1:84,161 in 1983.

---

[1] The term "Biomedical Engineer" is often used much more loosely to cover physicists, computer specialists, technicians, etc., working in the biomedical field, many of whom are not qualified as "Engineers". In this chapter, this looser interpretation is employed.

[2] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1983.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Canadian Medical and Biological Engineering Society
c/o National Research Council
Room 183, Building M-50
Ottawa, Ontario
K1A 0R8

National Executive Secretary: Mr. Nelson D. Durie

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating biomedical engineers.

III. PERSONNEL DATA

TABLE 1 NUMBER OF BIOMEDICAL ENGINEERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	56,900	-
2 (Lethbridge)	0	115,000	-
3 (Pincher Creek)	0	36,700	-
4 (Hanna)	0	12,400	-
5 (Drumheller)	0	39,300	-
6 (Calgary)[3]	1	96,508	1: 96,508
7 (Stettler)	0	40,500	-
8 (Red Deer)	0	129,700	-
9 (Banff)	0	22,900	-
10 (Camrose)	0	80,100	-
11 (Edmonton)[4]	0	121,444	-
12 (Fort McMurray)	2	88,500	1: 44,250
13 (Whitecourt)	0	55,100	-
14 (Hinton)	0	26,200	-
15 (Grande Prairie)	1	132,500	1:132,500
Census Metropolitan Area of Edmonton	15	682,056[5]	1: 45,470
Census Metropolitan Area of Calgary	9	620,692[5]	1: 68,966
PROVINCIAL TOTAL	28	2,356,500	1: 84,161

---

[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1983.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR BIOMEDICAL ENGINEERS IN ALBERTA, 1981, 1982, and 1983

	1981	1982	1983
Number of Registered Personnel[1]	26	25	28
% Change in Number of Registered Personnel	52.9%	-3.8%	12.0%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 86,066	1: 92,908	1: 84,161
- Canada[3]	1: 77,574	1: 81,275	-

[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1983.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Department of Applied Sciences in Medicine, the University of Alberta offers graduate programs for physicists, engineers, computing specialists, and other scientists. Both M.Sc. and Ph.D. degree programs are available to students registered in the Department of Applied Sciences in Medicine or registered in engineering or science faculties and carrying out their research within the Faculty of Medicine. In 1982-83, there were three graduates from the M.Sc. program and no graduates from the Ph.D. program.

TABLE 3 BASIC EDUCATION PROGRAMS FOR BIOMEDICAL ENGINEERS IN ALBERTA[1]

		1980-81	1981-82	1982-83
A.	Ph.D. PROGRAM			
	University of Alberta (Length of program: variable)			
	Enrolments:	2	2	0
	Graduates:	1	1	0
B.	MASTERS PROGRAMS			
	University of Alberta			
	Masters of Science (offered by the Faculties of Engineering and Science)			
	Enrolments:	4	4	8
	Graduates:	2	2	3
	University of Alberta			
	Masters of Science (offered by the Department of Applied Sciences in Medicine)			
	Enrolments:	2	2	2
	Graduates:	-	-	0
	PROVINCIAL TOTAL			
	Number of M.Sc. Programs: 2			
	Enrolments:	6	6	10
	Graduates	2	2	3

[1] Source: Department of Applied Sciences in Medicine, the University of Alberta.

b) Continuing Education Programs:

The Canadian Medical and Biological Engineering Society has developed certification programs for Clinical Engineers and Biomedical Engineering Technicians and Technologists. The Association holds annual conferences and occasionally sponsors courses.

CHILD CARE WORKERS

I. OVERVIEW

Definition:	Care for and counsel emotionally disturbed or mentally handicapped children and youths in residential treatment facility, in special school or social intervention program. Supervise daily activities and attend to needs of children and youth under care. Arrange and direct recreational activities. Counsel children and youths to help them deal with personal or behavioural problems. Enforce residential rules and take measures to control unruly behaviour. Assess and report problems and progress of children and youths. Confer with other staff members and refer difficult cases to health care professionals or social workers. Help to mediate between child and parents, if required. Provide individual guidance for youths in social intervention programs within community or assist in supervision of special school classes for emotionally disturbed children, if required. Prepare meals, clean and perform related housekeeping duties, if required. (Source: No. 2333, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Child Care Workers' Association of Alberta is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Socal Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 1,124 child care workers practicing in Alberta.[1] About 76 percent of the child care workers were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial child care worker-to-population ratio was 1:2,097 in 1983. As the clientele of the province's child care workers in Alberta's population is the younger age groups, the provincial child care worker-to-population (5-17 years) ratio was 1:423 in 1983.[2]

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984. This figure does not include 233 community youth workers.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Child Care Workers' Association of Alberta
P.O. Box 11360
Edmonton, Alberta
T5J 3K6

President: Mr. Jack Phelan

b) Licensing, Registration or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating child care workers.

---

[2] Source: "1983 Population Projections, Series 5, Females and Males, 1983," Population Projections, Alberta 1982-2011. Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

III. PERSONNEL DATA

TABLE 1 NUMBER OF CHILD CARE WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	23	56,900	1: 2,474
2 (Lethbridge)	45	115,000	1: 2,556
3 (Pincher Creek)	14	36,700	1: 2,621
4 (Hanna)	0	12,400	-
5 (Drumheller)	0	39,300	-
6 (Calgary)[3]	25	96,508	1: 3,860
7 (Stettler)	6	40,500	1: 6,750
8 (Red Deer)	40	129,700	1: 3,243
9 (Banff)	0	22,900	-
10 (Camrose)	0	80,100	-
11 (Edmonton)[4]	6	121,444	1:20,241
12 (Fort McMurray)	56	88,500	1: 1,580
13 (Whitecourt)	2	55,100	1:27,550
14 (Hinton)	5	26,200	1: 5,240
15 (Grande Prairie)	50	132,500	1: 2,650
Census Metropolitan Area of Edmonton	431	682,056	1: 1,582
Census Metropolitan Area of Calgary	421	620,692	1: 1,474
PROVINCIAL TOTAL	1,124	2,356,500	1: 2,097

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Division," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR CHILD CARE WORKERS IN ALBERTA, 1981, 1982 AND 1983

	1981	1982	1983
Number of Practicing Personnel	1,149[1]	1,114[2]	1,124[3]
% Change in Number of Practising Personnel	18.6%	-3.0%	0.9%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.2%	4.5%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1:1,948	1:2,085	1:2,097

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March, 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1978-79 a two-year diploma program in youth development was offered by Grant McEwan Community College and a one-year certificate in youth services were offered by Mount Royal College. In 1979-80 the one-year certificate program at Mount Royal College was replaced by a two-year diploma program. In 1982-83 there were 35 graduates from the two programs.

TABLE 3 BASIC EDUCATION PROGRAMS FOR CHILD CARE WORKERS IN ALBERTA[1]

	1980-81	1981-82	1982-83
DIPLOMA CHILD CARE PROGRAMS			
Grant McEwan Community College (Length of program: 2 years)			
Enrolments:[2]			
1st Year	37	52	52
2nd Year	29	91	84
Graduates:	16	20	28
Mount Royal College (Length of program: 2 years)			
Enrolments:			
1st Year	36	39	42
2nd Year	9	8	18
Graduates:	1	11	7
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Enrolments:			
1st Year	73	91	94
2nd Year	38	99	102
Graduates:	17	31	35

[1] Source: Alberta Health and Social Services Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December, 1983.

[2] There were eight part-time students in 1980-81, 60 part-time students in 1981-82 and 59 part-time students in 1982-83. The increase in part-time enrolment in 1981-82 and 1982-83 was due to the development of a new outreach component of the program.

b) Continuing Education Programs:

The Child Care Workers' Association of Alberta held a number of conferences and workshops during 1983. These included a four-day Professional Development Conference and four two-day and one one-and-a-half-day training workshops.

CHIROPRACTORS

I. OVERVIEW

Definition: A chiropractor practises the philosophy, science, and art of analyzing and the adjustment or manipulation of the human spinal column and other structures incidental thereto, and includes the use of x-ray and analytical instruments in relation thereto; "adjustment or manipulation" means a calculated procedure, force or thrust designed to move one structure in relation to another, particularly of the spinal column, to remove subluxations or fixations and to mobilize the affected structures for the purpose of restoring or maintaining health.

(Source: The Chiropractic Profession Act, Ch. 14, S.2[a][e])

In 1983 there were 291 chiropractors registered with the Alberta Chiropractic Association (A.C.A.) in Alberta.[1] About 54 percent of the chiropractors resided in the Census Metropolitan Areas of Edmonton and Calgary. The number of chiropractors registered in Alberta increased by 10.6 percent between 1981 and 1983. The provincial chiropractor-to-population ratio was 1: 8,098 in 1983.

---

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the A.C.A. and residing in Alberta as of December 31, 1983. Excludes inactive, honorary, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Chiropractic Association
12536 - 125 Street
Edmonton, Alberta
T5L 0T3

Registrar: Dr. David E. Peterson

b) Licensing, Registration, or Certification Authority:

Alberta Chiropractic Association
12536 - 125 Street
Edmonton, Alberta
T5L 0T3

and

Chiropractic Appraisal Board
c/o Professions and Occupations
8th Floor, West Tower
Devonian Building
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

c) Legislation:

Under the authority of the Chiropractic Profession Act, all individuals who wish to practice as chiropractors must register with the A.C.A. Annual re-registration with the Association is required of all chiropractors in order to continue to practice in Alberta.

The A.C.A. is responsible for regulating the conduct and discipline of chiropractors. The Chiropractic Appraisal Board, a provincial government certification body, sets the educational qualifications required for registration with the A.C.A. Any individual who is a graduate of a training program approved by the Board, and who passes an examination prescribed by the Board, or who is a member of the Canadian Chiropractic Association can be certified by the Board as being eligible for registration.

III. PERSONNEL DATA

TABLE 1 NUMBER OF CHIROPRACTORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	56,900	1: 6,322
2 (Lethbridge)	25	115,000	1: 4,600
3 (Pincher Creek)	4	36,700	1: 9,175
4 (Hanna)	1	12,400	1: 12,400
5 (Drumheller)	7	39,300	1: 5,614
6 (Calgary)[3]	13	96,508	1: 7,424
7 (Stettler)	5	40,500	1: 8,100
8 (Red Deer)	24	129,700	1: 5,404
9 (Banff)	2	22,900	1:11,450
10 (Camrose)	11	80,100	1: 7,282
11 (Edmonton)[4]	12	121,444	1:10,120
12 (Fort McMurray)	5	88,500	1:17,700
13 (Whitecourt)	7	55,100	1: 7,871
14 (Hinton)	2	26,200	1:13,100
15 (Grande Prairie)	8	132,500	1:16,563
Census Metropolitan Area of Edmonton	76	682,056[5]	1: 8,974
Census Metropolitan Area of Calgary	80	620,692[5]	1: 7,759
PROVINCIAL TOTAL	291	2,356,500	1: 8,098

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the A.C.A. and residing in Alberta as of December 31, 1983. Excludes inactive, honorary, and retired members.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR CHIROPRACTORS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	263	281	291
% Change in Number of Registered Personnel	1.9%	6.8%	3.6%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 8,508	1: 8,266	1: 8,098
- Western Canada[3]	1: 9,979	-	-
- Canada[4]	1:11,673	1:11,062	-

---

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the Alberta Chiropractic Association and residing in Alberta as of June 30, 1981, 1982, and 1983. Excludes inactive, honorary, and retired members.

[2] Source: *Alberta Statistical Review*, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Sources: *Rollcall Update 83*, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[4] Source: *Canada Health Manpower Inventory, 1983*, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is no training program for chiropractors in Alberta. The Canadian Memorial Chiropractor College in Toronto, which offers a four-year training program, is the only institution where chiropractic training can be obtained in Canada. Many of Alberta's chiropractors received their training in the United States.

b) Continuing Education Programs:

The Alberta Chiropractic Association sponsored four seminars for its members in 1983.

COMBINED LABORATORY AND X-RAY TECHNICIANS

I. OVERVIEW

Definition: The combined technician is a hospital worker trained to perform laboratory and x-ray work in smaller hospitals that do not have sufficient volume or range of work to warrant their employing both a laboratory technologist and an x-ray technician.

(Source: Saskatchewan Health Manpower Annual Report 1976, Policy Research and Management Services Branch, Department of Health, Province of Saskatchewan)

Since registration with the Alberta Society of Certified Combined Technicians is not mandatory, the survey of employers conducted by the Alberta Health and Social Services Disciplines Committee on September 30, 1983 was used as an alternative source of manpower information.

In 1983 there were 239 combined laboratory and x-ray technicians practicing in Alberta.[1] About 27 percent of these personnel were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial combined laboratory and x-ray technician-to-population ratio was 1: 9,860 in 1983. In major urban centers, most of the services provided by combined laboratory and x-ray technicians were also provided by medical laboratory technologists and radiological technicians (see chapters on Medical Laboratory Technologists and Radiological Technicians).

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Certified Combined
Technicians
General Delivery
Ponoka, Alberta
T0C 2H0

President: Ms. Brenda Leeb

b) Licensing, Registration or Certification Authority:

Medical Radiological Technicians Board
(not currently operating)

c) Legislation:

Under the authority of the Radiological Technicians Act, all individuals who wish to practice as combined laboratory and x-ray technicians must register with the Medical Radiological Technicians Board, a provincial government licensing body. Annual re-registration with the Board is required of all combined laboratory and x-ray technicians in order to continue to practice in Alberta.

The Board is responsible for regulating the conduct and discipline of all combined laboratory and x-ray technicians. In addition, the Board sets the educational qualifications required for registration.

However, the Medical Radiological Technicians Board has not operated for a number of years. As a result, the above-mentioned provisions of the Radiological Technicians Act are not currently in effect.

III. PERSONNEL DATA

TABLE 1 NUMBER OF COMBINED LABORATORY AND X-RAY TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	56,900	1:28,450
2 (Lethbridge)	12	115,000	1: 9,583
3 (Pincher Creek)	5	36,700	1: 7,340
4 (Hanna)	6	12,400	1: 2,067
5 (Drumheller)	7	39,300	1: 5,614
6 (Calgary)[3]	15	96,508	1: 6,434
7 (Stettler)	20	40,500	1: 2,025
8 (Red Deer)	23	129,700	1: 5,639
9 (Banff)	3	22,900	1: 7,633
10 (Camrose)	21	80,100	1: 3,814
11 (Edmonton)[4]	11	121,444	1:11,040
12 (Fort McMurray)	17	88,500	1: 5,206
13 (Whitecourt)	15	55,100	1: 3,673
14 (Hinton)	1	26,200	1:26,200
15 (Grande Prairie)	17	132,500	1: 7,794
Census Metropolitan Area of Edmonton	42	682,056[5]	1:16,239
Census Metropolitan Area of Calgary	22	620,692[5]	1:28,213
PROVINCIAL TOTAL	239	2,356,500	1: 9,860

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2

SELECTED MANPOWER STATISTICS FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	284[1]	271[2]	239[3]
% Change in Number of Practicing Personnel	-8.7%	-4.6%	-11.8%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 7,879	1: 8,571	1: 9,860

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel, "Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Edmonton, Alberta, Alberta Bureau of Statistics, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology offers a one-year program leading to a certificate in combined laboratory and x-ray technology. In 1983 this program produced a total of 22 graduates.

TABLE 3 BASIC EDUCATION PROGRAM FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Northern Alberta Institute of Technology (Length of program: 1 year)			
Enrolments:[2]	33	28	29
Graduates:	22	20	22

[1] Source: Alberta Health and Social Services Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] Students commencing the program in August are counted in the following academic year so that variations in starting and graduation dates do not create distortions when data are displayed on the basis of academic years.

b) Continuing Education Programs:

The Alberta Society of Certified Combined Technicians ran a number of workshops for its members in 1983, in addition to its annual convention. As well, correspondence courses were offered by the Society.

DENTAL ASSISTANTS

I. OVERVIEW

Definition: Assist dentists in care and treatment of patients. Seat and prepare patient for dental treatment. Arrange instruments, materials and medications and hand them to the dentist. Keep oral operating area clear during dental procedure by using suction devices, water sprays, cotton rolls and holders, and by retraction of cheek and tongue. Prepare filling materials, using mechanical amalgamator and instruments and supply them to dentist as required. Comfort patient through reassuring conversation and actions. Give emergency treatment, as directed by dentist, for local and systemic distress. Advise patients on post-operative care, oral hygiene, and importance of diet and preventive dentistry. Sterilize instruments, using ovens, autoclaves and aseptic solutions. Pour, trim and mount plaster models from impressions taken by dentist and perform other dental laboratory procedures. Perform routine maintenance duties such as lubricating equipment, sharpening dental instruments, replacing expendable parts and cleaning equipment and treatment area. Expose, process and mount X-ray films. Polish teeth, apply fluoride to teeth and perform other intra-oral procedures, as permitted by training and by provincial legislation. Act as receptionist, if required.

(Source: No. 3157, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Dental Assistants Association is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 1,795 dental assistants practicing in Alberta.[1] About 69 percent of the province's dental assistants were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial dental assistant-to-population ratio was 1:1,313 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Dental Assistants Association
50 Chinook Dr. S.W.
Calgary, Alberta
T2V 2P6

Administrative Assistant/Registrar: Ms. Vicki Kranenburg, CDA

b) Licensing, Registration, or Certification Authority:

Alberta Dental Assistants Association
50 Chinook Drive S.W.
Calgary, Alberta
T2V 2P6

c) Legislation:

No legislation exists in Alberta requiring mandatory registration of all individuals practicing as dental assistants in Alberta.

Under the authority of The Dental Association Act, the Alberta Dental Association, through its by-laws, can delegate the performance of duties of a dental nature to certain classes of persons. Under By-Law 17, the Alberta Dental Association requires that all dental assistants who perform intra-oral duties be registered with the Alberta Dental Assistants Association. There is no requirement for mandatory registration of individuals who only perform general dental assisting duties in the offices of private practice dentists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTAL ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	36	56,900	1:1,581
2 (Lethbridge)	84	115,000	1:1,369
3 (Pincher Creek)	15	36,700	1:2,447
4 (Hanna)	5	12,400	1:2,480
5 (Drumheller)	14	39,300	1:2,807
6 (Calgary)[3]	32	96,508	1:3,016
7 (Stettler)	15	40,500	1:2,700
8 (Red Deer)	86	129,700	1:1,508
9 (Banff)	18	22,900	1:1,272
10 (Camrose)	45	80,100	1:1,780
11 (Edmonton)[4]	45	121,444	1:2,699
12 (Fort McMurray)	58	88,500	1:1,526
13 (Whitecourt)	24	55,100	1:2,296
14 (Hinton)	14	26,200	1:1,871
15 (Grande Prairie)	58	132,500	1:2,284
Census Metropolitan Area of Edmonton	692	682,056[5]	1: 986
Census Metropolitan Area of Calgary	554	620,692[5]	1:1,120
PROVINCIAL TOTAL	1,795	2,356,500	1:1,313

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Edmonton, Alberta, Municipal Affairs, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL ASSISTANTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	1,546[1]	1,601[2]	1,795[3]
% Change in Number of Practicing Personnel	99.2%	3.6%	12.1%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 1,447	1: 1,451	1:1,313
- Western Canada[5]	1: 1,720	1: 1,574	-
- Canada[6]	1:11,302	1:12,051	-

[1] Source: "March 31, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, September 1981.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Manitoba Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[6] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984. Figures refer to population per member of the Canadian Dental Nurses and Assistants Association.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer 37-week dental assistant training programs. The total number of graduates from these two programs was 101 in 1982-83. The Northern Alberta Institute of Technology also offers a 20-month dental assistant training program by correspondence. This program is designed for those presently employed in dental offices.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DENTAL ASSISTANTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Northern Alberta Institute of Technology (Length of program: 9½ months)			
Enrolments:	75	85	71
Graduates:	67	70	68
Southern Alberta Institute of Technology (Length of program: 37 weeks)			
Enrolments:	41	40	40
Graduates:	33	36	33
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Enrolments:	116	125	111
Graduates:	100	106	101

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs:

The Alberta Dental Assistants Association provided some continuing education programs for its members in 1983. The Association offered a number of seminars in conjunction with its annual convention. A correspondence course on Medical Dental Emergencies was also offered.

DENTAL HYGIENISTS

I. OVERVIEW

Definition: Provide preventive dental services and instruct patients in care of teeth and mouth. Scale and polish teeth to remove hard and soft deposits, using dental instruments and equipment. Polish fillings to remove tarnish and corrosion, using motorized apparatus. Apply topical agents and sealants to teeth to reduce decay. Conduct preliminary dental examination and record case history of patient. Record observed conditions and information for diagnosis and treatment planning by dentist. Instruct individuals and groups in home dental care and provide dietary counselling related to dental health. Expose, process and mount dental x-ray films. Take impressions of teeth for study models. Administer local anaesthetics, place, finish and polish fillings and remove sutures as permitted by training and by provincial legislation.

(Source: No. 3157, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Dental Hygienists Association is not mandatory, the employer survey conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 503 practicing dental hygienists in Alberta.[1] About 69 percent of the dental hygienists were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial dental hygienist-to-population ratio was 1:4,685 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Dental Hygienists Association
c/o Ms. Diane Howes
123 Rundle Ridge Place N.E.
Calgary, Alberta
T1Y 2L3

President: Ms. Diane Howes

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

The Dental Association Act defines duties of a dental hygienist and prescribes the necessary educational qualifications for a dental hygienist in Alberta. In order to practice in the province, dental hygienists must be graduates of the Dental Hygiene Program at the University of Alberta or, if they are graduates from other training programs, they must be certified by the Universities Co-ordinating Council.

Although The Dental Association Act prescribes the practice requirements for hygienists, the Act does not give the Alberta Dental Association any authority to either register or discipline dental hygienists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTAL HYGIENISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	15	56,900	1: 3,793
2 (Lethbridge)	17	115,000	1: 6,765
3 (Pincher Creek)	3	36,700	1:12,233
4 (Hanna)	1	12,400	1:12,400
5 (Drumheller)	5	39,300	1: 7,860
6 (Calgary)[3]	4	96,508	1:24,127
7 (Stettler)	3	40,500	1:13,500
8 (Red Deer)	26	129,700	1: 4,988
9 (Banff)	5	22,900	1: 4,580
10 (Camrose)	15	80,100	1: 5,367
11 (Edmonton)[4]	18	121,444	1: 6,747
12 (Fort McMurray)	23	88,500	1: 3,848
13 (Whitecourt)	4	55,100	1:13,775
14 (Hinton)	5	26,200	1: 5,240
15 (Grande Prairie)	11	132,500	1:12,045
Census Metropolitan Area of Edmonton	182	682,056[5]	1: 3,748
Census Metropolitan Area of Calgary	166	620,692[5]	1: 3,739
PROVINCIAL TOTAL	503	2,356,500	1: 4,685

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL HYGIENISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	409[1]	480[2]	503[3]
% Change in Number of Practicing Personnel	65.6%	17.4%	4.8%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 5,471	1: 4,839	1: 4,685
- Western Canada[5]	1: 6,329	1: 5,999	-
- Canada[6]	1: 5,944	1: 5,636	-

[1] Source: "March 31, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Service Disciplines Committee, Edmonton, Alberta, September 1981.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Sources: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Manitoba Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[6] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a two-year diploma program in dental hygiene. The program produced 39 graduates in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL HYGIENISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
University of Alberta (Length of program: 2 years)			
Enrolments:			
1st Year	46	43	43
2nd Year	33	43	40
Graduates	33	42	39

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs:

Continuing education programs in dental hygiene were sponsored by the Faculty of Extension, the University of Alberta in 1983. In addition, the regional chapters of the Alberta Dental Hygienists' Association in Calgary and Edmonton provided some continuing education programs. Lectures and seminars were held in conjunction with the Association's annual convention. Dental hygienists were also invited to attend seminars hosted by the District Dental Societies in Edmonton and Calgary.

DENTAL TECHNICIANS

I. OVERVIEW

Definition: Make and repair dentures and other dental devices. Fabricate full and partial dentures, using wax and plaster models, dental surveyors, articulators (fitting devices) and electric grinders and polishers. Shape metal, vulcanite or plastic plates for dentures. Mount porcelain or plastic teeth in plates using knowledge of size, shape, shade and colour. Finish dentures on grinding and buffing wheels. Construct metal clasps, inlays, bridgework and other aides according to specifications. Join breaks, make additions or reline denture bases to repair dentures.

(Source: No. 3157, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

In 1983 there were 148 dental technicians registered with the Alberta Dental Technicians Board in Alberta.[1] About 86 percent of the dental technicians were residing in the Census Metropolitan Areas of Edmonton and Calgary. Private dental laboratories in Edmonton and Calgary handle much of the dental technician work for the rural areas of Alberta through the mail.

The number of dental technicians registered in Alberta decreased by 5.1 percent between 1981 and 1983. The provincial dental technician-to-population ratio was 1:15,922 in 1983. Some of the services such as the making of complete dentures, provided by dental technicians were also be provided by denturists (see chapter on Denturists).

---

[1] Source: Alberta Dental Technicians Board. Number of dental technicians registered with the Alberta Dental Technicians Board and residing in Alberta as of October 13, 1983. Number includes dental technicians who were also denturists.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Registered Dental Technicians
c/o Mr. Kim Starko
Inter Provincial Dental Lab
10578 - 109 Street
Edmonton, Alberta
T5H 3B2

Secretary-Treasurer: Mr. Kim Starko

b) Licensing, Registration, or Certification Authority:

Alberta Dental Technicians Board
c/o Professions and Occupations
8th Floor, West Tower
Devonian Building
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

Board Chairman: Dr. T. Curry

c) Legislation:

Under the authority of the Dental Technicians Act, all individuals who wish to practice as dental technicians must register with the Alberta Dental Technicians Board, a provincial government licensing body. Annual re-registration with the Board is required of all dental technicians in order to continue to practice in Alberta.

The Board is responsible for regulating the conduct and discipline of dental technicians. The Board also sets the educational qualifications required for registration.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	56,900	1: 56,900
2 (Lethbridge)	7	115,000	1: 16,429
3 (Pincher Creek)	1	36,700	1: 36,700
4 (Hanna)	0	12,400	-
5 (Drumheller)	0	39,300	-
6 (Calgary)[3]	1	96,508	1: 96,508
7 (Stettler)	0	40,500	-
8 (Red Deer)	2	129,700	1: 64,850
9 (Banff)	0	22,900	-
10 (Camrose)	3	80,100	1: 26,700
11 (Edmonton)[4]	2	121,444	1: 60,722
12 (Fort McMurray)	0	88,500	-
13 (Whitecourt)	1	55,100	1: 55,100
14 (Hinton)	0	26,200	-
15 (Grande Prairie)	2	132,500	1: 66,250
Census Metropolitan Area of Edmonton	84	682,056[5]	1: 8,120
Census Metropolitan Area of Calgary	44	620,692[5]	1:14,107
PROVINCIAL TOTAL	148	2,356,500	1:15,922

---

[1] Source: Alberta Dental Technicians Board. Number of dental technicians registered with the Alberta Dental Technicians Board and residing in Alberta as of October 13, 1983. Number includes dental technicians who were also denturists.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL TECHNICIANS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	156	146	148
% Change in Number of Registered Personnel	-2.5%	-6.4%	1.4%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
Alberta	1:14,344	1:15,909	1:15,922
Western Canada[3]	1: 9,012	-	-

[1] Source: Alberta Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1981, 1982, and October 13, 1983.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Manitoba Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In order to become a dental technician, an individual must pass the examination set by the Alberta Dental Technicians Board and must have either five years of practical experience, of which one year is in Alberta, or a two-year dental technician diploma plus three years of practical experience.

A two-year dental laboratory technology diploma program is offered at the Northern Alberta Institute of Technology (N.A.I.T.). The first year of the program is a "core" year with the denturist technology diploma program at N.A.I.T. There were eight graduates from this program in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL TECHNICIANS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Northern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments[2]:			
1st Year	12	17	18
2nd Year	13	10	11
Graduates:	10	11	8

[1] Source: Alberta Health and Social Service Training Program Inventory 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] These figures include only full-time students.

b) Continuing Education Programs:

There were no continuing education programs offered for dental technicians in 1983.

DENTISTS

I. Overview

Definition: A dentist provides professional services including:

the diagnosis or treatment of, and the prescribing, treating or operating for the prevention, alleviation or correction of any disease, pain, deficiency, deformity, defect, lesion, disorder or physical condition of, in or from any human tooth, associated structure or tissue or any injury thereto,

the making, producing, reproducing, constructing, fitting, furnishing, supplying, altering or repairing or prescribing or advising the use of any prosthetic denture, bridge, appliance or thing for any of the purposes indicated in subclause (i), or to replace, improve or supplement any human tooth, or to prevent, alleviate, correct or improve any condition upon or in connection with any human tooth, associated structure or tissue, or in the treatment of any condition thereof, and

the taking or making, or the giving of advice or assistance or the providing of facilities for the taking or making of any impression, bite, cast or design preparatory to, or for the purpose of, or with a view to the making, producing, reproducing, constructing, fitting, furnishing, supplying, altering or repairing of any such prosthetic denture, bridge, appliance or thing;

(Source: The Dental Association Act, 1970, Ch. 90, S.2)

In 1983 there were 1,138 dentists registered with the Alberta Dental Association (A.D.A.) in Alberta.[1] Of these dentists, 88 percent were general practitioners and 12 percent were specialists. About 72 percent of the dentists were graduates of the Faculty of Dentistry at the University of Alberta, 20 percent were graduates of dental programs in other

---

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1983. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

Canadian provinces, and eight percent were graduates of foreign training programs.

About 71 percent of the dentists were residing in the Census Metropolitan Areas of Edmonton and Calgary. The number of dentists registered in Alberta increased by 10.8 percent between 1981 and 1983. The provincial dentist-to-population ratio was 1:2,071 in 1983.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

Executive Director: Dr. B.P. Martinello

b) Licensing, Registration, or Certification Authority:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

c) Legislation:

Under the authority of the Dental Association Act, all individuals who wish to practice as dentists must register with the A.D.A. Annual re-registration with the Association is required of all dentists in order to continue practicing in Alberta.

The A.D.A. is responsible for regulating the conduct and discipline of its members. The Dental Association Act sets the educational qualifications required for registration with the A.D.A., and the A.D.A. sets the post-basic educational qualifications required for registration as a dental specialist. In addition, the Association has the authority to prescribe continuing education programs which its members must complete. The Universities Coordinating Council is responsible for the certification of specialists.

III. PERSONNEL DATA

TABLE 1A NUMBER OF DENTISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	19	56,900	1: 2,995
2 (Lethbridge)	54	115,000	1: 2,130
3 (Pincher Creek)	14	36,700	1: 2,621
4 (Hanna)	2	12,400	1: 6,200
5 (Drumheller)	11	39,300	1: 3,573
6 (Calgary)[3]	17	96,508	1: 5,677
7 (Stettler)	10	40,500	1: 4,050
8 (Red Deer)	57	129,700	1: 2,275
9 (Banff)	14	22,900	1: 1,636
10 (Camrose)	23	80,100	1: 3,483
11 (Edmonton)[4]	27	121,444	1: 4,498
12 (Fort McMurray)	27	88,500	1: 3,278
13 (Whitecourt)	17	55,100	1: 3,241
14 (Hinton)	11	26,200	1: 2,382
15 (Grande Prairie)	30	132,500	1: 4,417
Census Metropolitan Area of Edmonton	441	682,056[5]	1: 1,547
Census Metropolitan Area of Calgary	364	620,692[5]	1: 1,705
PROVINCIAL TOTAL	1,138	2,356,500	1: 2,071

---

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1983. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 1B NUMBER OF DENTISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1983

Community by Size	Number Registered[1]	Population[2]	Dentist-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	364	620,692	1: 1,705
Census Metropolitan Area of Edmonton	441	682,056	1: 1,547
Between 10,000 and 60,000			
Airdrie	4	10,431	1: 2,608
Camrose	6	12,809	1: 2,135
Fort McMurray	8	34,494	1: 4,312
Grande Prairie	14	24,076	1: 1,720
Leduc	6	12,471	1: 2,079
Lethbridge	39	58,086	1: 1,489
Medicine Hat	19	41,493	1: 2,184
Red Deer	37	50,257	1: 1,358
Spruce Grove	5	11,307	1: 2,261
Wetaskiwin	4	10,022	1: 2,506
Between 5,000 and 10,000			
Brooks	3	9,421	1: 3,140
Drumheller	3	6,671	1: 2,224
Edson	5	7,329	1: 1,466
High River	3	5,049	1: 1,683
Hinton	4	8,825	1: 2,206
Innisfail	6	5,444	1: 907
Lacombe	4	5,954	1: 1,489
Lloydminster	7	9,226	1: 1,318
Peace River	4	6,043	1: 1,511
Ponoka	4	5,221	1: 1,305
Stettler	3	5,136	1: 1,712
Stony Plain	4	5,291	1: 1,323
Taber	3	5,988	1: 1,996
Vegreville	3	5,251	1: 1,750
Whitecourt	3	5,408	1: 1,803
Under 5,000	132	692,049	1: 5,243
TOTAL	1,138	2,356,500	1: 2,071

---

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1983. Excludes inactive and retired members and some dentists who worked for the federal Government but were not registered with the A.D.A..

[2] Source: "Population Statistics", Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	1,027	1,087	1,138
% Change in Number of Registered Personnel	4.8%	5.8%	4.7%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
Percent Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratio:			
- Alberta	1:2,179	1:2,137	1:2,071
- Western Canada[3]	1:2,032	1:1,995	1:1,965
- Canada[4]	1:2,135	1:2,087	-

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1981, 1982, and 1983. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[4] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year program in dentistry leading to a Doctor of Dental Surgery (D.D.S.) degree. A student must complete two years of "pre-dentistry" university preparation before acceptance into the program. Forty-eight students graduated from the program at the University of Alberta in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
University of Alberta (Length of program: 4 years)			
Enrolments:			
1st Year	50	51	51
2nd Year	48	50	50
3rd Year	52	48	44
4th Year	44	49	48
Graduates:	46	49	48

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs:

The Alberta Dental Association requires its members to participate in continuing education programs. Many courses in dentistry were offered in 1983 by the Continuing Education Department of the Faculty of Dentistry, the University of Alberta.

The seven local Dental Societies usually presented one-day courses on a once-a-month basis throughout the year except for June, July, and August. Local Dental Societies, other than those in Edmonton and

Calgary, had such courses every two or three months. The courses presented cover a broad range of disciplines and topics.

Other organizations offered continuing education courses in Alberta on occasion. In addition, some dentists attended courses in other provinces and in the United States.

APPENDIX

DENTISTS BY SPECIALTY AND DENTIST-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1983[1]

Specialty	Number of Dentists	Dentist-to-Population Ratio
Endodontics	11	1: 214,227
Oral Pathology	5	1: 471,300
Oral Surgery	17	1: 138,618
Orthodontics	46	1: 51,228
Paedodontics	35	1: 67,329
Prosthodontics	15	1: 157,100
Oral Radiology	1	1:2,356,500
Dental Public Health	3	1: 785,500
Specialty Total	133	1: 17,718
General Practice	1,005	1: 2,345
GRAND TOTAL	1,138	1: 2,071

[1] Source: Alberta Dental Association.

DENTURISTS

I. OVERVIEW

Definition: Design, construct, fit and repair dentures. Measure patient's jaws to determine size and shape of dentures using face bows, dental articulators and other devices. Make impression and mould of teeth, gums and jaws and design dentures. Direct other workers to construct dentures. Fit, adjust and repair dentures. Construct dentures, if required.

(Source: No. 3157, Canadian Classification and Dictionary of Occupations, 1981 - Revision)

In 1983 there were 155 certified denturists (formerly known as certified dental mechanics) registered with the Board of Examiners to the Dental Mechanics Act in Alberta.[1] About 66 percent of the denturists resided in the Census Metropolitan Areas of Edmonton and Calgary. The number of denturists certified in Alberta increased by 2.6 percent between 1981 and 1983. The provincial denturists-to-population ratio was 1:15,203 in 1983.

Some of the services, such as making complete dentures, provided by denturists were also provided by dental technicians. Similarly, some other functions of denturists, such as taking impressions for complete dentures, were also handled by dentists (see chapters on Dental Technicians and Dentists).

---

[1] Source: The Board of Examiners to the Dental Mechanics Act. Number of denturists registered with the Board of Examiners to the Dental Mechanics Act and residing in Alberta as of October 13, 1983. Number includes denturists who were also dental technicians.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Denturist Society of Alberta
201 Century Centre
2 Athabascan Avenue
Sherwood Park, Alberta
T8A 4E3

President: Mr. Raymond Hansen

b) Licensing, Registration, or Certification Authority:

Board of Examiners for Certified
Dental Mechanics
c/o Professions and Occupations
8th Floor, West Tower
Devonian Building
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

Board Chairman: Mr. Elmer Abele

c) Legislation:

In December 1981, the Dental Mechanics Amendment Act, 1981 was passed and assented to. This Act amended the Dental Mechanics Act by permitting dental mechanics to designate themselves as denturists.

Under the authority of The Dental Mechanics Act, all individuals who wish to practice as denturists in the province must be certified by and registered with the Board of Examiners for Certified Dental Mechanics, a provincial government licensing body. Registration with the Denturist Society of Alberta is voluntary.

The Board is responsible for regulating the conduct and discipline of all denturists. The Board is empowered to re-examine any denturist at any time and to suspend or cancel his certification if warranted. The Board also sets the educational qualifications required for certification as a denturist in Alberta.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTURISTS and PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	56,900	1:18,967
2 (Lethbridge)	10	115,000	1:11,500
3 (Pincher Creek)	2	36,700	1:36,700
4 (Hanna)	0	12,400	-
5 (Drumheller)	3	39,300	1:13,100
6 (Calgary)[3]	1	96,508	1:96,508
7 (Stettler)	2	40,500	1:20,250
8 (Red Deer)	9	129,700	1:14,411
9 (Banff)	1	22,900	1:22,900
10 (Camrose)	6	80,100	1:10,013
11 (Edmonton)[4]	5	121,444	1:20,241
12 (Fort McMurray)	4	88,500	1:22,125
13 (Whitecourt)	1	55,100	1:55,100
14 (Hinton)	2	26,200	1:13,100
15 (Grande Prairie)	5	132,500	1:26,500
Census Metropolitan Area of Edmonton	61	682,056[5]	1:10,344
Census Metropolitan Area of Calgary	41	620,692[5]	1:14,778
PROVINCIAL TOTAL	155	2,356,500	1:15,203

---

[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta as of October 13, 1983. Number includes denturists who were also dental technicians.

[2] Source: "1983 Population Projectins for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTURISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	151	156	155
% Change in Number of Registered Personnel	8.6%	3.3%	-0.7%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios: - Alberta	1:14,819	1:14,889	1:15,203

[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta as of December 31, 1981 and 1982, and October 13, 1983.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are two routes that a person may take in order to become a denturist in Alberta. The first way is to apprentice for five years under the supervision of a certified denturist. During this time students are required to complete examinations at four levels conducted by the Board of Examiners for Certified Dental Mechanics.

The second way is to enrol in a two-year training program offered by the Northern Alberta Institute of Technology. Upon completion of this program, the graduate is required to apprentice for two years under the supervision of a certified denturist. During this time the graduates are required to complete examinations at four levels. There were nine graduates from the denturist technology diploma program in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTURISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Northern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:[2]			
1st Year	16	18	18
2nd Year	14	16	15
Graduates:	10	10	9

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] These figures refer only to full-time students.

b) Continuing Education Programs:

There were no continuing education programs offered by educational institutions for denturists in Alberta in 1983. However, some continuing education programs and seminars were provided by the Denturist Society of Alberta.

DIETARY TECHNICIANS

I. OVERVIEW

Definition: Assist in the planning and supervision of food service programs in governmental, institutional and commercial establishment. Plan menus and diets, under direction of dietitian or nutritionist, to provide required food and nutrients to individuals and groups. Arrange work schedules and assist in supervision of those engaged in preparation and serving of meals. Purchase or requisition food, equipment and other supplies. Maintain food-cost-control and other operational records to assist in improving efficiency and quality of food service system. Inspect storage facilities and work areas to ensure observance of sanitation, safety and security standards. Maintain attendance and personnel records and assist with inventory of supplies and equipment.

(Source: No. 3159, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Society of Dietary Technicians is not mandatory, the employer survey conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 245 dietary technicians practicing in Alberta.[1] About 54 percent of the dietary technicians were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial dietary technician-to-population ratio was 1:9,618 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Dietary Technicians
P.O. Box 3791, Station "D"
Edmonton, Alberta
T5L 4J8

or

Box 2353
Calgary, Alberta
T2P 2M6

President: Mrs. Lucy Denham

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating dietary technicians.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DIETARY TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	56,900	1:11,380
2 (Lethbridge)	10	115,000	1:11,500
3 (Pincher Creek)	5	36,700	1: 7,340
4 (Hanna)	1	12,400	1:12,400
5 (Drumheller)	6	39,300	1: 6,550
6 (Calgary)[3]	5	96,508	1:19,302
7 (Stettler)	6	40,500	1: 6,750
8 (Red Deer)	19	129,700	1: 6,826
9 (Banff)	6	22,900	1: 3,817
10 (Camrose)	10	80,100	1: 8,010
11 (Edmonton)[4]	2	121,444	1:60,722
12 (Fort McMurray)	6	88,500	1:14,750
13 (Whitecourt)	5	55,100	1:11,020
14 (Hinton)	2	26,200	1:13,100
15 (Grande Prairie)	25	132,500	1: 5,300
Census Metropolitan Area of Edmonton	76	682,056[5]	1: 8,974
Census Metropolitan Area of Calgary	56	620,692[5]	1: 9,618
PROVINCIAL TOTAL	245	2,356,500	1: 9,618

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETARY TECHNICIANS IN ALBERTA 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	203[1]	234[2]	245[3]
% Change in Number of Practising Personnel	-11.4%	15.3%	4.7%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios: - Alberta	1:11,023	1: 9,926	1: 9,618

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology both offer a two-year program for dietary technicians, leading to a diploma in dietary service technology. In 1982-83 there were 40 graduates from the two programs.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DIETARY TECHNICIANS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Northern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:			
1st Year	32	31	31
2nd Year	26	24	23
Graduates:	20	23	20
Southern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:			
1st Year	36	24	39
2nd Year	21	26	20
Graduates:	19	21	20
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Enrolments:			
1st Year	68	55	70
2nd Year	47	50	43
Graduates:	39	44	40

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Services Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs:

There were no continuing education programs offered by provincial post-secondary institutions in Alberta for dietary technicians in 1983. However, one or more seminars were offered by the Alberta Society of Dietary Technicians.

DIETITIANS/NUTRITIONISTS

I. OVERVIEW

Definition: Dietitians

Plan and supervise food service programs in governmental, institutional and commercial establishments to provide nutritionally adequate quality food. Plan diets and menus and evaluate clients' acceptance. Plan and submit budget and manage and control operating costs. Establish and maintain standards of food production and service, sanitation, safety and security. Supervise workers and direct efficient use of personnel and equipment. Institute measures to improve efficiency and quality of food service system. Plan, conduct and evaluate orientation and in-service training programs. Determine food, equipment and supply requirements. Administer established personnel policies. Plan layout designs and determine equipment requirements for new or renovated food services facilities. Prepare material on nutritional value of foods, methods of preparation and recipes, if required.

(Source: No. 3152, *Canadian Classification and Dictionary of Occupations*, 1980 - Revision)

Nutritionists

Provide consulting services to community and organize, plan and conduct programs concerning nutrition to assist in promotion of health and prevention of disease. Assess nutritional needs and available resources of community. Develop and implement community programs concerning nutrition. Advise health and other agencies on nutritional and food services standards of their food programs. Counsel individuals and families in nutritional principles, diet, food selection and economical buying practices. Interpret and evaluate current research relating to nutrition and food service systems management to public and to staff. Conduct or participate in in-service education. Plan, conduct and evaluate nutrition education programs for public. Prepare technical publications and publications for the public concerning food and nutrition. Plan, conduct and evaluate dietary studies and participate in studies of diseases with nutrition component. Plan or participate in funding programs and recommend budget. Manage and control financial resources.

(Source: No. 3152, *Canadian Classification and Dictionary of Occupations*, 1980 - Revision)

In 1983 there were 330 dietitians/nutritionists registered with the Alberta Dietitians Association (A.R.D.A.) in Alberta.[1] Registration with the A.R.D.A. is not mandatory in order to practice in the province. Not all registered dietitians/nutritionists practice in the health and social service sector. There were 235 dietitians/nutritionists employed in the health and social service sector in 1983.[2]

About 80 percent of the registered dietitians/nutritionists were residing in the Census Metropolitan Aress of Edmonton and Calgary. The number of registered dietitians/nutritionists increased by 17.0 percent between 1981 and 1983. The provincial registered dietitian/nutritionist-to-population ratio was 1: 7,140 in 1983.

---

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1983. Excludes inactive honorary, and retired members.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

President: Ms. Sue Wales Arnold

b) Licensing, Registration, or Certification Authority:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

c) Legislation:

Currently Alberta has no legislation requiring mandatory registration of all dietitians/nutritionists practising in the province. However, under the authority of the Registered Dietitians Act, individuals may register with the Alberta Registered Dietitians Association. Only those dietitians/nutritionists who are registered with the Association may use the title "Registered Dietitian." Annual re-registration with the Association is required for dietitians/nutritionists in order to continue using the title "Registered Dietitian."

The A.R.D.A. is responsible for regulating the conduct and discipline of its members. The Universities Coordinating Council sets the educational qualifications required for registration with the A.R.D.A. In addition, the Registered Dietitians Act stipulates additional educational and experiential qualifications for membership in the Association.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DIETITIANS/NUTRITIONISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	56,900	1:14,225
2 (Lethbridge)	7	115,000	1:16,429
3 (Pincher Creek)	5	36,700	1: 7,340
4 (Hanna)	1	12,400	1:12,400
5 (Drumheller)	0	39,300	-
6 (Calgary)[3]	3	96,508	1:32,169
7 (Stettler)	1	40,500	1:40,500
8 (Red Deer)	15	129,700	1: 8,647
9 (Banff)	0	22,900	-
10 (Camrose)	7	80,100	1:11,443
11 (Edmonton)[4]	10	121,444	1:12,144
12 (Fort McMurray)	5	88,500	1:17,700
13 (Whitecourt)	3	55,100	1:18,367
14 (Hinton)	1	26,200	1:26,200
15 (Grande Prairie)	6	132,500	1:22,083
Census Metropolitan Area of Edmonton	135	682,056[5]	1: 5,052
Census Metropolitan Area of Calgary	127	620,692[5]	1: 4,887
PROVINCIAL TOTAL	330	2,356,500	1: 7,140

---

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the Alberta Registered Dietitians Association and residing in Alberta as of April 30, 1983. Excludes inactive, honorary, and retired members.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETITIANS/NUTRITIONISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	282	311	330
% Change in Number of Registered Personnel	9.7%	10.3%	6.1%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 7,935	1: 7,468	1: 7,140
- Western Canada[3]	1: 6,852	-	1: 6,541
- Canada[4]	1: 5,849	1: 5,782	-

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1981, 1982, and 1983. Excludes inactive, honorary, and retired members.

[2] Source: *Alberta Statistical Review*, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Sources: *Rollcall Update 83*, Division of Health Services Research and Development, University of British Columbia, Vancouver British Columbia, March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The British Columbia figures refer to personnel who are registered and practising (registration for dietitians/nutritionists is not compulsory in British Columbia). The Saskatchewan, Manitoba and Alberta figures refer to personnel registered with their respective associations.

[4] Source: *Canada Health Manpower Inventory, 1983*, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Faculty of Home Economics at the University of Alberta offers a four-year baccalaureate degree program in food and nutrition. This program produced 27 graduates in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAM FOR DIETITIANS/NUTRITIONISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
University of Alberta (Length of program: 4 years)			
Enrolments:			
1st Year	33	23	30
2nd Year	30	20	35
3rd Year	26	30	16
4th Year	21	27	41
Graduates	19	15	27

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs:

Continuing education programs were offered by the Alberta Registered Dietitians Association for its members. These programs included monthly seminars and workshops which covered various topics. Approximately 20-25 sessions were held throughout the province.

EMERGENCY MEDICAL TECHNICIANS - PARAMEDIC

I. OVERVIEW

Definition: An emergency attendant:

> Gives emergency care to sick and injured persons at the scene of the accident or illness and during transport to the hospital. Assists with lifting of patient onto wheeled cart or stretcher and into and out of ambulance. Gives first aid such as mouth-to-mouth resuscitation, cardiac massage, administration of oxygen and application of bandages and splints. Assists with rescue work, if required. Performs duties of AMBULANCE DRIVER if required.
>
> (Source: No. 2139-30, Canadian Classification and Dictionary of Occupations, 1980 - Revision)
>
> An Emergency Medical Technician - Paramedic is an emergency attendant capable of providing advanced life support services.
>
> Advanced life support for the patient in cardiac arrest:
>
> ....consists of the following elements: basic life support, use of adjunctive equipment for ventilation and circulation, cardiac monitoring for dysrythmia recognition and control, defibrillation, establishment and maintenance of an intravenous infusion line, employment of definitive therapy, including drug administration... stabilization of the patient's condition and transportation with continuous monitoring.
>
> (Source: American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." Journal of the American Medical Association, 1974, p. 852)

In 1983 there were 234 paid and six volunteer emergency medical technicians - paramedic (commonly known as emergency paramedics) practicing in Alberta.[1] About 57 percent of the emergency medical technicians -

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Serivce Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

paramedics were practicing in the Census Metropolitan Area of Calgary. The provincial emergency paramedic-to-population ratio was 1:9,189 in 1983.

In Alberta, municipalities have the power to set the level of ambulance services beyond a legislated minimum standard. Some municipalities have established advanced life support level ambulance services and others have not. The municipalities which have established advanced life support level ambulance services include: Airdrie, Calgary, Edmonton, Fort McMurray, Grande Prairie, High River, Innisfail, Medicine Hat, and St. Albert. This factor partly accounts for the very uneven distribution of emergency paramedic personnel in Alberta.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Registered Emergency Paramedic Association of Alberta
P.O. Box 6859
Postal Station "D"
Calgary, Alberta
T2P 2E9

President: Mr. Richard White

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation in Alberta which regulates emergency medical technicians - paramedic exclusively. However, there are four pieces of legislation which deal with ambulance services and ambulance attendants.

The Motor Transport Act requires that every "Class A Ambulance" in the province must be staffed by at least one qualified attendant who holds at least a St. John's Ambulance Certificate.

The Municipal Government Act allows municipalities to provide ambulance services which exceed the minimum standards set forth in the Motor Transport Act. Some municipalities have passed ambulance service regulations under this Act.

The Provincial Board of Health, under the Public Health Act, has the power to make regulations regarding the training and experience of ambulance drivers and attendants. So far, the Board of Health has made no such regulations.

The Medical Profession Act empowers the College of Physicians and Surgeons of Alberta to regulate "medical assistants" in the province and this provision of the Act was originally intended to apply to ambulance attendants. However, to date, the College has not made any regulations affecting "medical assistants."

On June 6, 1983 emergency medical technicians - paramedic were designated under the Health Occupations Act. The Minister responsible for Professions and Occupations will establish a health occupation committee for emergency medical technicians - paramedic. This committee will be responsible for preparing draft regulations for this occupation to be presented to the Health Occupations Board.

III. PERSONNEL DATA

TABLE 1 NUMBER OF EMERGENCY MEDICAL TECHNICIANS - PARAMEDIC AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	56,900	1: 5,173
2 (Lethbridge)	0	115,000	-
3 (Pincher Creek)	1	36,700	1: 36,700
4 (Hanna)	0	12,400	-
5 (Drumheller)	2	39,300	1: 19,650
6 (Calgary)[3]	12	96,508	1: 8,042
7 (Stettler)	0	40,500	-
8 (Red Deer)	5	129,700	1: 25,940
9 (Banff)	0	22,700	-
10 (Camrose)	0	80,100	-
11 (Edmonton)[4]	1	121,444	1:121,444
12 (Fort McMurray)	8	88,500	1: 11,063
13 (Whitecourt)	4	55,100	1: 13,775
14 (Hinton)	0	26,200	-
15 (Grande Prairie)	13	132,500	1: 10,192
Census Metropolitan Area of Edmonton	47	682,056[5]	1: 14,512
Census Metropolitan Area of Calgary	136	620,692[5]	1: 4,564
PROVINCIAL TOTAL	240	2,356,500	1: 9,819

---

[1] Source: "September 30, 1983 Survey of Employees of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Fdmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR EMERGENCY MEDICAL TECHNICIANS - PARAMEDIC IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered or Practicing Personnel	117[1]	164[1]	240[2]
% Change in Number of Registered or Practicing Personnel	11.4%	40.2%	N/A[3]
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios: - Alberta	1:19,126	1:14,163	1: 9,819

[1] Source: Registered Emergency Paramedic Association of Alberta. Number of emergency paramedics registered with the Registered Emergency Paramedic Association of Alberta and residing in Alberta as of August 31, 1981 and 1982. Excludes honorary, inactive and retired members.

[2] Source: "September 30, 1983 Survey of Employees of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[3] Information unavailable because a different source was used for the 1983 data.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer a two-year training program for emergency medical technicians - paramedic. There were 57 graduates from the two programs in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAMS FOR EMERGENCY MEDICAL TECHNICIANS - PARAMEDIC IN ALBERTA[1]

	1980-81	1981-82	1982-83
Northern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments[2]:			
1st Year	-	30	25
2nd Year	-	-	25
Graduates:	-	-	25
Southern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:			
1st Year	33	32	28
2nd Year	29	31	29
Graduates:	26	29	32
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Enrolments:			
1st Year	33	62	53
2nd Year	29	31	54
Graduates:	26	29	57

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] This program began in 1981-82. Therefore there were no 2nd year enrolments or graduates before 1982-83.

b) Continuing Education Programs:

Red Deer College offered seminars for graduate emergency medical technicians - paramedic in 1983.

HEALTH RECORD ADMINISTRATORS

I. OVERVIEW

Definition: Compile and maintain medical records and statistics of hospital and clinic patients. Review clinical records for completeness and contact medical personnel to obtain missing data. Code, index and file records of diagnoses, diseases and treatments. Compile statistics, such as, reports on admissions, births, deaths, transfers and discharges. Release medical information to staff and authorized government agencies, insurance companies, physicians, hospitals and medical information and research centres. May brief and transcribe records. May testify in court to authenticate medical records.

(Source: No. 4161, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Health Record Association is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 144 health record administrators practicing in Alberta.[1] About 47 percent of all health record administrators were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial health record administrator-to-population ratio was 1:16,365 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Carol Van Nice

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating health record administrators.

III. PERSONNEL DATA

TABLE 1 NUMBER OF HEALTH RECORD ADMINISTRATORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	56,900	1:18,967
2 (Lethbridge)	6	115,000	1:19,167
3 (Pincher Creek)	3	36,700	1:12,233
4 (Hanna)	1	12,400	1:12,400
5 (Drumheller)	4	39,300	1: 9,825
6 (Calgary)[3]	4	96,508	1:24,127
7 (Stettler)	3	49,500	1:13,500
8 (Red Deer)	11	129,700	1:11,791
9 (Banff)	2	22,900	1:11,450
10 (Camrose)	11	80,100	1: 7,282
11 (Edmonton)[4]	5	121,444	1:24,289
12 (Fort McMurray)	1	88,500	1:88,500
13 (Whitecourt)	8	55,100	1: 6,888
14 (Hinton)	4	26,200	1: 6,550
15 (Grande Prairie)	10	132,500	1:13,250
Census Metropolitan Area of Edmonton	43	682,056[5]	1:15,862
Census Metropolitan Area of Calgary	25	620,692[5]	1:24,828
PROVINCIAL TOTAL	144	2,356,500	1:16,365

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Estimates by Census Division," Alberta Bureau of Statistics, Edmonton, Alberta, 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	132[1]	138[2]	144[3]
% Change in Number of Practicing Personnel	3.9%	4.5%	4.3%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratio:			
- Alberta	1:16,952	1:16,831	1:16,365
- Canada[5]	1:10,719	1:11,392	-

[1] Source: "September 30, 1981 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology offers a two-year program leading to a health records administrator diploma. There were 12 graduates from the program in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Northern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:			
1st Year	17	15	14
2nd Year	14	15	14
Graduates:	14	15	12

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs

The education committee of the Alberta Health Record Association conducted three meetings in 1983 dealing with general issues related to the field.

HEALTH RECORD TECHNICIANS

I. OVERVIEW

Definition: Assist Health Record Administrators, carry out many technical activities within the medical record department, typing medical information, preparing statistical reports, reviewing medical records, supervising clerical personnel, working with doctors, nurses and other health professionals on medical research projects.

(Source: Health Manpower Provincial Report, Manitoba, 1978)

Since registration with the Alberta Health Record Association is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 319 practicing health record technicians in Alberta.[1] About 41 percent of the health record technicians were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial health record technician-to-population ratio was 1:7,387 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Carol Van Nice

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating health record technicians.

III. PERSONNEL DATA

TABLE 1 NUMBER OF HEALTH RECORD TECHNICIANS AND PERSONNEL-TO POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	56,900	1: 9,483
2 (Lethbridge)	15	115,000	1: 7,667
3 (Pincher Creek)	10	36,700	1: 3,670
4 (Hanna)	6	12,400	1: 2,067
5 (Drumheller)	4	39,300	1: 9,825
6 (Calgary)[3]	12	96,508	1: 8,042
7 (Stettler)	11	40,500	1: 3,682
8 (Red Deer)	31	129,700	1: 4,184
9 (Banff)	5	22,900	1: 4,580
10 (Camrose)	20	80,100	1: 4,005
11 (Edmonton)[4]	7	121,444	1:17,349
12 (Fort McMurray)	18	88,500	1: 4,917
13 (Whitecourt)	15	55,100	1: 3,673
14 (Hinton)	1	26,200	1:26,200
15 (Grande Prairie)	26	132,500	1: 5,096
Census Metropolitan Area of Edmonton	69	682,056[5]	1: 9,855
Census Metropolitan Area of Calgary	63	620,692[5]	1: 9,852
PROVINCIAL TOTAL	319	2,356,500	1: 7,387

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD TECHNICIANS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	253[1]	277[2]	319[3]
% Change in Number of Practicing Personnel[4]	19.9%	9.5%	15.2%
Population (Alberta)[5]	2,237,724	2,322,690	2,356,000
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratio: - Alberta	1: 8,845	1: 8,385	1: 7,387

---

[1] Source: "September 30, 1981 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs

The Southern Alberta Institute of Technology (S.A.I.T.) offers a 12-month health record certificate program. Ten months of the program are spent at S.A.I.T., and another two months are spent in a hospital practicum. Sixteen students graduated from the program in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD TECHNICIANS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Southern Alberta Institute of Technology (Length of program: 12 months)			
Enrolments[2]:	25	23	22
Graduates:	17	16	16

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] The enrollment figures include both full-time and part-time students. There were four part-time students in 1980-81, one part-time student in 1981-82 and one part-time student in 1982-83.

b) Continuing Education Programs

The education committee Alberta Health Record Association conducted three meetings in 1983 dealing with general issues related to the field.

MEDICAL LABORATORY TECHNOLOGISTS

I. OVERVIEW

Definition: Perform medical laboratory tests, procedures, experiments and analyses for the diagnosis, treatment and prevention of disease. Conduct chemical analysis of blood, urine, cerebro-spinal and other body fluids to ascertain normal and abnormal constituents. Study blood cells, their numbers, morphological characteristics and coagulation factors related to various physiological and pathological conditions. Prepare tissue sections for microscopic examination using fixation, imbedding, cutting and staining techniques to demonstrate special cellular tissue elements or other characteristics. Study micro-organisms which cause disease and their effect upon the human body, using a variety of microscopic and macroscopic techniques. Perform blood group, type and compatability tests for transfusion purposes. Investigate responses of body to foreign cells or agents.

(Source: No. 3156, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Canadian Society of Laboratory Technologists is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 1,928 practicing medical laboratory technologists in Alberta.[1] About 77 percent of the medical laboratory technologists were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial medical laboratory technologist-to-population ratio was 1:1,222 in 1983.

Some of the basic laboratory services provided by medical laboratory technologists were also provided by combined laboratory and x-ray technicians especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March, 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Medical Laboratory Technologists
Box 4165
Edmonton, Alberta
T6E 4T2

President: Ms. Irene Scarth

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating medical laboratory technologists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF MEDICAL LABORATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	37	56,900	1: 1,538
2 (Lethbridge)	90	115,000	1: 1,278
3 (Pincher Creek)	16	36,700	1: 2,293
4 (Hanna)	1	12,400	1:12,400
5 (Drumheller)	9	39,300	1: 4,367
6 (Calgary)[3]	19	96,508	1: 5,079
7 (Stettler)	23	40,500	1: 1,761
8 (Red Deer)	80	129,700	1: 1,621
9 (Banff)	13	22,900	1: 1,762
10 (Camrose)	35	80,100	1: 2,289
11 (Edmonton)[4]	18	121,444	1: 6,747
12 (Fort McMurray)	39	88,500	1: 2,269
13 (Whitecourt)	16	55,100	1: 3,444
14 (Hinton)	8	26,200	1: 3,275
15 (Grande Prairie)	45	132,500	1: 2,944
Census Metropolitan Area of Edmonton	855	682,056[5]	1: 798
Census Metropolitan Area of Calgary	624	620, 692[5]	1: 995
PROVINCIAL TOTAL	1,928	2,356,500	1: 1,222

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA, 1981, 1982, AND 1983

	1980	1981	1982
Number of Practicing Personnel	1,895[1]	1,863[2]	1,928[3]
% Change in Number of Practicing Personnel	1.6%	-1.7%	3.5%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1:1,181	1:1,247	1:1,222
- Western Canada[5]	1:1,172	-	-
- Canada[6]	1:1,314	1:1,328	-

[1] Source: "September 30, 1981 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Manitoba Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The figure for British Columbia refers to personnel who are registered and practicing (registration for medical laboratory technologists in B.C. is not compulsory). The Saskatchewan and Alberta figures refer to practicing personnel, while the Manitoba figure refers to personnel registered with their association.

[6] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer medical laboratory technology diploma programs. Both programs are two years in length. There were 93 graduates from the two programs in 1982-83.

The University of Alberta also offers a four-year B.Sc. program in medical laboratory science. There were 18 graduates from this program in 1982-83.

TABLE 3

BASIC EDUCATION PROGRAMS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
A. DIPLOMA PROGRAMS			
Northern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:[2]			
1st Year	65	72	76
2nd Year	47	45	62
Graduates:	50	41	62
Southern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:[2]			
1st Year	53	48	47
2nd Year	32	44	36
Graduates:	28	38	31
PROVINCIAL TOTAL			
Number of Diploma Programs: 2			
Enrolments:[2]			
1st Year	118	120	123
2nd Year	79	89	98
Graduates:	78	79	93
B. BACCALAUREATE PROGRAM			
University of Alberta (Length of program: 4 years)			
Enrolments:			
1st Year	30	35	35
2nd Year	23	20	25
3rd Year	21	19	17
4th Year	18	18	18
Graduates:	18	18	18

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] The figures include both full-time and part-time students. There were no part-time students enroled in the two diploma programs in 1982-83.

b) Continuing Education Programs:

There were no continuing education programs for medical laboratory technologists offered by educational institutions in Alberta in 1983. However, the Alberta Society of Medical Technologists organized various seminars, workshops, and evening courses throughout the province. These programs varied in length from one day to several weeks and included relevant topics in all disciplines of medical technology. In addition, rural areas were served by four in-service correspondence courses.

OCCUPATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan and carry out treatment programs based on activities such as work, education and recreation to rehabilitate physically and mentally disabled persons. Administer test and observe patients to assess their emotional, mental and physical capacities. Plan and direct programs in manual and creative arts, industrial and vocational skills, recreational activities, remedial games, cultural and educational interests and play activities for children. Conduct group programs to assist patients in building self-confidence and in adjusting to family and community. Train handicapped patients in self-care and daily living activities. Advise and instruct patients on specially-adapted household equipment and furnishings. Assess patient's vocational potential and provide work adjustment and actual work experience. Participate in testing and training of patients with perceptual motor problems and provide training for children with learning disabilities. Record patient's activities, response and progress. Attend meetings of rehabilitation team and seminars, workshops and courses on occupational therapy. Supervise and instruct occupational therapy students and auxiliary personnel assigned to department.

(Source: No. 3137, Canadian Classification and Dictionary of Occupations, 1980 - Revision).

Since registration with the Alberta Association of Registered Occupational Therapists is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 315 practicing occupational therapists in Alberta.[1] About 83 percent of these personnel were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial occupational therapist-to-population ratio was 1:7,481 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Registered
Occupational Therapists
c/o Faculty of Rehabilitation Medicine
University of Alberta
310 Corbett Hall
Edmonton, Alberta
T6G 2G4

President: Ms. Judy Lee

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating occupational therapists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF OCCUPATIONAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratic
1 (Medicine Hat)	5	56,900	1:11,380
2 (Lethbridge)	8	115,000	1:14,375
3 (Pincher Creek)	2	36,700	1:18,350
4 (Hanna)	0	12,400	-
5 (Drumheller)	2	39,300	1:19,650
6 (Calgary)[3]	4	96,508	1:24,127
7 (Stettler)	1	40,500	1:40,500
8 (Red Deer)	15	129,700	1: 8,647
9 (Banff)	0	22,900	-
10 (Camrose)	3	80,100	1:26,700
11 (Edmonton)[4]	2	121,444	1:60,722
12 (Fort McMurray)	1	88,500	1:88,500
13 (Whitecourt)	4	55,100	1:13,775
14 (Hinton)	1	26,200	1:26,200
15 (Grande Prairie)	5	132,500	1:26,500
Census Metropolitan Area of Edmonton	164	682,056[5]	1: 4,159
Census Metropolitan Area of Calgary	98	620,692[5]	1: 6,334
PROVINCIAL TOTAL	315	2,356,500	1: 7,481

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL THERAPISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	229[1]	288[2]	315[3]
% Change in Number of Practicing Personnel	13.9%	25.8%	9.4%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 9,772	1: 8,065	1: 7,481
- Western Canada[5]	1: 9,674	-	-
- Canada[6]	1:13,236	1:12,635	-

[1] Source: "September 30, 1981 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Manitoba Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[6] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984. Figures refer to population per employed occupational therapist.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A four-year baccalaureate degree program is offered at the University of Alberta. In 1982-83, there were 40 graduates from the program.

Under an interprovincial training agreement, four training places per year are reserved for Saskatchewan students in the occupational therapy program at the University of Alberta.

TABLE 3 BASIC EDUCATION PROGRAM FOR OCCUPATIONAL THERAPISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
University of Alberta (Length of program: 4 years)			
Enrolments:[2]			
1st Year	Pre-Professional Yr	Pre-Professional Yr	Pre-Professional Yr
2nd Year	36	40	41
3rd Year	24	39	38
4th Year[3]	41	35	44
Graduates:	45	30	40

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] Enrolment figures include both full-time and part-time students. In 1980-81 there were 26 full-time and 15 part-time students, in 1981-82 there were 24 full-time and 11 part-time students, and in 1982-83 there were 37 full-time and 7 part-time students enroled in the fourth year of the program. The second and third year enrolment figures consisted of full-time students only.

[3] Increase in the fourth year enrolment in 1980-81 was due to graduates of three-year diploma programs returning to complete the fourth and final year of the program in order to earn their baccalaureate degrees.

b) Continuing Education Programs:

The Department of Occupational Therapy at the University of Alberta offered credit courses for diploma level occupational therapists who are working towards their baccalaureate degree.

The Alberta Association of Registered Occupational Therapists sponsored informal continuing education programs in the form of seminars, workshops, and short courses on topics related to occupational therapy.

The University of Calgary offered a number of continuing education courses for occupational therapists.

OPHTHALMIC DISPENSERS

I. OVERVIEW

Definition: An ophthalmic dispenser supplies, prepares, or dispenses ophthalmic appliances; interprets prescriptions from ophthalmologists or optometrists in respect of ophthalmic appliances; fits, adjusts and adapts ophthalmic appliances to the needs of the intended wearer in accordance with a prescription from an ophthamologist or optometrist, or without a prescription where lenses are duplicated with no change in their refractive value.

(Source: The Ophthalmic Dispensers Act, 1965, Ch. 66, S. 2; 1969, Ch. 84, S. 2)

In 1983 there were 277 ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers in Alberta.[1] About 79 percent of the ophthalmic dispensers were residing in the Census Metropolitan Areas of Edmonton and Calgary. The number of ophthalmic dispensers registered in Alberta increased by 9.9 percent between 1981 and 1983. The provincial ophthalmic dispenser-to-population ratio was 1:8,507 in 1983.

Most of the services provided by ophthalmic dispensers were also provided by optometrists (see chapter on Optometrists).

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Guild of Ophthalmic Dispensers
#250, 10830 Jasper Avenue
Edmonton, Alberta
T5J 2B3

President: Mr. William Carmichael

---

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 31, 1983.

b) Licensing, Registration, or Certification Authority:

Ophthalmic Dispensers Examining Board
c/o Professions and Occupations
8th Floor, West Tower
Devonian Building
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

and

Alberta Guild of Ophthalmic Dispensers
#250, 10830 Jasper Avenue
Edmonton, Alberta
T5T 2B3

c) Legislation:

Under the authority of the Ophthalmic Dispensers Act, all individuals who wish to practice as ophthalmic dispensers must apply for and receive a certificate of competency from the Ophthalmic Dispensers Examining Board, a provincial government certification body. Successful applicants must register with the Alberta Guild of Ophthalmic Dispensers. Annual re-registration is required of all ophthalmic dispenser in order to continue practicing in Alberta. The Ophthalmic Dispensers Examining Board also issues special certificates in dispensing contact lenses.

The Board stipulates standards of competency and proficiency for members of the Guild. The Guild is responsible for regulating the conduct and discipline of its members, but the Ophthalmic Dispensers Examining Board is also empowered to review matters of competency. The Board sets the educational qualifications required for a certificate of competency or a special certificate of competency in dispensing contact lenses and for registration with the Guild. Applicants are required to pass examinations offered by the Board.

III. PERSONNEL DATA

TABLE 1 NUMBER OF OPHTHALMIC DISPENSERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	56,900	1: 6,322
2 (Lethbridge)	14	115,000	1: 8,214
3 (Pincher Creek)	0	36,700	-
4 (Hanna)	0	12,400	-
5 (Drumheller)	1	39,300	1:39,300
6 (Calgary)[3]	2	96,508	1:48,254
7 (Stettler)	1	40,500	1:40,500
8 (Red Deer)	12	129,700	1:10,808
9 (Banff)	0	22,900	-
10 (Camrose)	5	80,100	1:16,020
11 (Edmonton)[4]	4	121,444	1:30,361
12 (Fort McMurray)	3	88,500	1:29,500
13 (Whitecourt)	0	55,100	-
14 (Hinton)	0	26,200	-
15 (Grande Prairie)	8	132,500	1:16,563
Census Metropolitan Area of Edmonton	125	682,056[5]	1: 5,456
Census Metropolitan Area of Calgary	93	620,692[5]	1: 6,674
PROVINCIAL TOTAL	277	2,356,500	1: 8,507

---

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 31, 1983.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPHTHALMIC DISPENSERS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	252	268	277
% Change in Number of Registered Personnel	20.0%	6.3%	3.4%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 8,880	1: 8,667	1: 8,507
- Canada[3]	1: 8,992	1: 8,469	-

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Guild and residing in Alberta as of December 31, 1981, 1982, and 1983.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for ophthalmic dispensers in Alberta. Most ophthalmic dispensers are trained on-the-job and through correspondence courses offered by the Canadian Guild of Ophthalmic Dispensers.

Beginning in 1980, an individual must have completed the Canadian Guild of Ophthalmic Dispensers correspondence course and have had three years of experience working in an optical laboratory or optical dispensary in order to take the examinations of the Alberta Ophthalmic Dispensers Training Board. Previously, individuals with five years of experience were eligible to take these examinations without completing the correspondence course.

Commencing in 1983 the applicant must attend at least seven out of ten classroom lectures in either Calgary or Edmonton. Should the applicant reside more than 300 km. from either city, attendance at only four out of ten lectures is required.

b) Continuing Education Programs:

There were no continuing education programs for ophthalmic dispensers offered by educational institutions in Alberta in 1983. However, eight one-hour lectures were offered at the annual convention of the professional association.

OPTOMETRISTS

I. OVERVIEW

Definition: A person engaged in the practice of optometry.

"Practice of optometry" means:

(i) the examination of the human eye, its related structures and the human vision system in order to measure, assess, diagnose or refer for consultation or treatment any conditions of the human eye, its related structures and the human vision system;

(ii) the treatment of conditions of the human eye, its related structures and the human vision system, through the prescribing and dispensing of ophthalmic appliances or other aids, the prescribing and provision of orthoptics or perceptual training and the offering of advice, consultation or counselling.

(Source: Optometry Profession Act)

In 1983 there were 197 optometrists registered with the Alberta Optometric Association (A.P.A.) in Alberta.[1] About 63 percent of the optometrists were located in the Census Metropolitan Areas of Edmonton and Calgary. Some optometrists in larger urban centers operate satellite offices in neighboring rural areas and smaller centers throughout the province.

The number of optometrists registered in Alberta increased by 5.3 per cent between 1981 and 1983. The provincial optometrist-to-population ratio was 1: 11,962 in 1983.

---

[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.D.A. and residing in Alberta as of December 31, 1983. Excludes honorary, inactive and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Optometric Association
No. 2, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

Executive Director: Mr. Adrian Berry

b) Licensing, Registration, or Certification Authority:

Board of Examiners for Optometry
c/o Professions and Occupations
8th Floor, West Tower
Devonian Building
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

and

Alberta Optometric Association
No. 2, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

c) Legislation:

Under the authority of the Optometry Act, all individuals who wish to practice as optometrists must apply for and receive a Certificate of Approval for Registration from the Board of Examiners for Optometry, a provincial government certification body. Successful applicants must register with the Alberta Optometric Association. Annual re-registration is required of all optometrists in order to continue practicing in Alberta.

The A.O.A. is responsible for regulating the conduct and discipline of its members. The Board of Examiners for Optometry sets the educational qualifications and conducts both written and oral examinations to determine eligibility for registration with the Alberta Optometric Association.

III. PERSONNEL DATA

TABLE 1A NUMBER OF OPTOMETRISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	56,900	1: 14,225
2 (Lethbridge)	13	115,000	1: 8,846
3 (Pincher Creek)	1	36,700	1: 36,700
4 (Hanna)	1	12,400	1: 12,400
5 (Drumheller)	0	39,300	-
6 (Calgary)[3]	4	96,508	1: 24,127
7 (Stettler)	2	40,500	1: 20,250
8 (Red Deer)	18	129,700	1: 7,206
9 (Banff)	1	22,900	1: 22,900
10 (Camrose)	6	80,100	1: 13,350
11 (Edmonton)[4]	5	121,444	1: 24,289
12 (Fort McMurray)	5	88,500	1: 17,700
13 (Whitecourt)	5	55,100	1: 11,020
14 (Hinton)	1	26,200	1: 26,200
15 (Grande Prairie)	6	132,500	1: 22,083
Census Metropolitan Area of Edmonton	63	682,056[5]	1: 10,826
Census Metropolitan Area of Calgary	62	620,692[5]	1: 10,011
PROVINCIAL TOTAL	197	2,356,500	1: 11,962

[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.O.A. and residing in Alberta as of December 31, 1983. Excludes honorary, inactive, and retired members.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Edmonton, Alberta, Municipal Affairs, 1983.

TABLE 1B NUMBER OF OPTOMETRISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1983

Community by Size	Number Registered[1]	Population[2]	Optometrist-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	62	620,692	1:10,011
Census Metropolitan Area of Edmonton	63	682,056	1:11,962
Between 10,000 and 60,000			
Airdrie	2	10,431	1: 5,216
Camrose	3	12,809	1: 4,270
Fort McMurray	2	34,494	1:17,247
Grande Prairie	4	24,076	1: 6,019
Leduc	1	12,471	1:12,471
Lethbridge	11	58,086	1: 5,281
Medicine Hat	4	41,493	1:10,373
Red Deer	13	50,257	1: 3,866
Spruce Grove	1	11,307	1:11,307
Wetaskiwin	2	10,022	1: 5,011
Between 5,000 and 10,000			
Brooks	0	9,421	-
Drumheller	0	6,671	-
Edson	0	7,329	-
High River	2	5,049	1: 2,525
Hinton	1	8,825	1: 8,825
Innisfail	1	5,444	1: 5,444
Lacombe	1	5,954	1: 5,954
Lloydminster	2	9,226	1: 4,613
Peace River	1	6,043	1: 6,043
Ponoka	2	5,221	1: 2,611
Stettler	1	5,136	1: 5,136
Stony Plain	0	5,291	-
Taber	1	5,988	1: 5,988
Vegreville	1	5,251	1: 5,251
Whitecourt	2	5,408	1: 2,704
Under 5,000	14	692,049	1:49,432
TOTAL	197	2,356,500	1:11,962

---

[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.R.A. and residing in Alberta as of December 31, 1983. Excludes honorary, inactive and retired members.

[2] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPTOMETRISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	187	191	197
% Change in Number of Registered Personnel	4.5%	2.1%	3.1%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 11,966	1: 12,161	1: 11,962
- Western Canada[3]	1: 13,136	-	-
- Canada[4]	1: 11,022	10,402	-

---

[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.O.A. as of December 31, 1981, 1982, and 1983. Excludes honorary, inactive, and retired members.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March, 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[4] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is no training program for optometrists in Alberta. However, Alberta, Saskatchewan, and Manitoba have had an inter-provincial training agreement with the School of Optometry at the University of Waterloo and the Government of Ontario since 1976. Under this agreement, the three Western provinces annually purchase 13 training places (Alberta : seven places; Saskatchewan : three places; Manitoba : three places) in the four-year program at the University of Waterloo.

In 1983 Alberta had a total of 25 students enrolled in the four year training program at the University of Waterloo under the current agreement. In September 1981 the agreement with the University of Waterloo and the Government of Ontario was renewed for a further five-year period. Pre-requisite for admission into the School is two years of pre-optometry training (or equivalent courses in the sciences, including physics, mathematics, biology, zoology, chemistry, and psychology.

In addition to the University of Waterloo, a program in optometry is offered in French at the University of Montreal. The Western provinces have no inter-provincial training agreements with the University of Montreal.

b) Continuing Education Programs:

No continuing education programs for optometrists were offered by educational institutions in 1983 in Alberta. However, two or more educational seminars were sponsored by the Alberta Optometric Association. Each of these seminars is of the nature and length to enable those who attend to obtain the 12 hours of continuing education required of each member each year.

PHARMACISTS

I. OVERVIEW

Definition:	Compound and dispense prescribed pharmaceuticals and related preparations. Prepare or supervise preparation of liquid medicines, ointments, powders, pills and other medications. Check prescriptions for overdoses and drug interactions. Weigh, measure and mix drugs and other medicinal compounds and fill bottles and capsules with correct quantity and composition of preparation. Store and preserve biologicals, vaccines, serums and other drugs to prevent deterioration. Dispense medical and surgical products for internal and external use as prescribed. Maintain patient medication profiles and record prescriptions dispensed and poisons and narcotics issued. Order and maintain stock of pharmaceutical supplies. Provide information on uses and effects of medicaments. Sell non-prescription drugs, sick-room supplies, toiletries, cosmetics, lotions and other commercial products. (Source: No. 3151, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

In 1983 there were 1,816 pharmacists registered with the Alberta Pharmaceutical Association (A.P.A.) in Alberta.[1] About 61 percent of the pharmacists were residing in the Census Metropolitan Areas of Edmonton and Calgary. The number of pharmacists registered in Alberta increased by 6.9 percent between 1981 and 1983. The provincial pharmacist-to-population ratio was 1: 1,298 in 1983.

---

[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1983. Excludes inactive, honorary, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

Registrar-Treasurer: Mr. Larry J. Shipka

b) Licensing, Registration, or Certification Authority:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

c) Legislation:

Under the authority of the Pharmaceutical Association Act, all individuals who wish to practice as pharmacists must register with the A.P.A. Annual re-registration with the Association is required of all pharmacists in order to continue practicing in Alberta.

The Alberta Pharmaceutical Association is also responsible for regulating the conduct and discipline of its members. The Pharmaceutical Association Act sets the educational qualifications required for registration with the A.P.A.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PHARMACISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	42	56,900	1: 1,355
2 (Lethbridge)	87	115,000	1: 1,322
3 (Pincher Creek)	23	36,700	1: 1,596
4 (Hanna)	9	12,400	1: 1,378
5 (Drumheller)	35	39,300	1: 1,123
6 (Calgary)[3]	50	96,508	1: 1,930
7 (Stettler)	27	40,500	1: 1,500
8 (Red Deer)	106	129,700	1: 1,224
9 (Banff)	19	22,900	1: 1,205
10 (Camrose)	57	80,100	1: 1,405
11 (Edmonton)[4]	79	121,444	1: 1,537
12 (Fort McMurray)	52	88,500	1: 1,702
13 (Whitecourt)	35	55,100	1: 1,574
14 (Hinton)	12	26,200	1: 2,183
15 (Grande Prairie)	66	132,500	1: 2,008
Census Metropolitan Area of Edmonton	675	682,056[5]	1: 1,010
Census Metropolitan Area of Calgary	442	620,692[5]	1: 1,404
PROVINCIAL TOTAL	1,816	2,356,500	1: 1,298

---

[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1983. Excludes inactive, honorary, and retired members.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 1B NUMBER OF PHARMACISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1983

Community by Size	Number Registered[1]	Population[2]	Pharmacist-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	442	620,692	1: 1,404
Census Metropolitan Area of Edmonton	675	682,056	1: 1,010
Between 10,000 and 60,000			
Airdrie	5	10,431	1: 2,086
Camrose	14	12,809	1: 915
Fort McMurray	18	34,494	1: 1,916
Grande Prairie	19	24,076	1: 1,267
Leduc	17	12,471	1: 734
Lethbridge	55	58,086	1: 1,056
Medicine Hat	34	41,493	1: 1,220
Red Deer	61	50,257	1: 824
Spruce Grove	11	11,307	1: 1,028
Wetaskiwin	18	10,022	1: 557
Between 5,000 and 10,000			
Brooks	8	9,421	1: 1,178
Drumheller	12	6,671	1: 556
Edson	5	7,329	1: 1,466
High River	4	5,049	1: 1,262
Hinton	7	8,825	1: 1,261
Innisfail	9	5,444	1: 605
Lacombe	7	5,954	1: 851
Lloydminster	7	9,226	1: 1,318
Peace River	9	6,043	1: 671
Ponoka	10	5,221	1: 522
Stettler	7	5,136	1: 734
Stony Plain	4	5,291	1: 1,323
Taber	7	5,998	1: 857
Vegreville	6	5,251	1: 875
Whitecourt	4	5,408	1: 1,352
Under 5,000	341	692,049	1: 2,029
TOTAL	1,816	2,356,500	1: 1,298

[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with A.P.A. and residing in Alberta as of December 31, 1983. Excludes inactive, honorary, and retired members.

[2] Source: "Population Statistics", Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number Registered[1]	1,699	1,765	1,816
% Change in Number Registered	5.5%	3.9%	2.9%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 1,317	1: 1,316	1: 1,298
- Western Canada[3]	1: 1,336	1: 1,320	-
- Canada[4]	1: 1,439	1: 1,411	-

[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1981, 1982, and 1983. Excludes inactive, honorary, and retired members.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Manitoba Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[4] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATION PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year program in pharmacy leading to a Bachelor of Science degree in pharmacy. Ninety-seven students graduated from the B.Sc. program in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAM FOR PHARMACISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
University of Alberta (Length of program: 4 years)			
Enrolments:			
1st Year	69	85	87
2nd Year[2]	123	102	76
3rd Year	97	107	88
4th Year	101	96	104
Graduates:	99	94	97

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] Transfer students who have credits for first-year courses can enter the program at the second-year level. These students are counted in the quota for the program. First-year enrolment figures are low in 1980-81 because more transfer students were admitted into the second year in 1980-81.

b) Continuing Education Programs:

The Division of Continuing Pharmacy Education of the Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta annually publishes a booklet, Prospectives, which outlines continuing education programs that are currently available to the province's pharmacists. These programs are sponsored by the Faculty of Pharmacy and Pharmaceutical Sciences and the Alberta Pharmaceutical Association. These programs include interprofessional forums, workshops, seminars, Sunday sessions (which are offered throughout the province), and correspondence courses. Regular lectures and courses offered in the Faculty of Pharmacy and Pharmaceutical Sciences are also open to pharmacists who wish to continue their education.

PHARMACY ASSISTANTS

I. OVERVIEW

Definition: Assist pharmacist in hospital, industrial or retail pharmacy. Compound and mix ointments, solutions, lotions or other medications, according to specific instructions, under supervision of pharmacist. Pre-package drugs. Label drugs, chemical or other pharmaceutical preparations. Assist with keeping records of narcotics issued and returned. Count drugs issued, keeps inventory and prepare orders for suppliers, as approved by the pharmacist. Unpack and store supplies and verify items received against invoices. Wash and sterilize bottles, beakers and other glassware and utensils. Clean pharmacy work area. Answer inquiries at wicket and deliver drug items, if required. Compute charges for narcotics and pharmaceuticals dispensed from pharmacy, if required.

(Source: No. 3159, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since there is no professional association for pharmacy assistants, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 332 practicing pharmacy assistants in Alberta.[1] About 66 percent of these personnel were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial pharmacy assistant-to-population ratio was 1:7,098 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

None.

b) Licensing, Registration or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating pharmacy assistants.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PHARMACY ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	56,900	1: 8,129
2 (Lethbridge)	18	115,000	1: 6,389
3 (Pincher Creek)	0	36,700	-
4 (Hanna)	1	12,400	1: 12,400
5 (Drumheller)	4	39,300	1: 9,825
6 (Calgary)[3]	4	96,508	1: 24,127
7 (Stettler)	4	40,500	1: 10,125
8 (Red Deer)	25	129,700	1: 5,188
9 (Banff)	2	22,900	1: 11,450
10 (Camrose)	11	80,100	1: 7,282
11 (Edmonton)[4]	3	121,444	1: 40,481
12 (Fort McMurray)	16	88,500	1: 5,531
13 (Whitecourt)	4	55,100	1: 13,775
14 (Hinton)	2	26,200	1: 13,100
15 (Grande Prairie)	11	132,500	1: 12,045
Census Metropolitan Area of Edmonton	138	682,058[5]	1: 4,942
Census Metropolitan Area of Calgary	82	620,692[5]	1: 7,569
PROVINCIAL TOTAL	332	2,356,500	1: 7,098

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACY ASSISTANTS IN ALBERTA, 1981, 1982 AND 1983

	1981	1982	1983
Number of Practicing Personnel	276[1]	270[2]	332[3]
% Change in Number of Practicing Personnel	58.6%	-2.2%	23.0%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios: - Alberta	1: 8,108	1: 8,603	1: 7,098

[1] Source: "September 31, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau Statistics, Edmonton, Alberta, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The majority of pharmacy assistants in Alberta were trained on the job. However, in 1976 a one-year program leading to a pharmacy technician certificate was established at Red Deer College. In 1982-83 there were 24 graduates from this program.

TABLE 2 BASIC EDUCATION PROGRAM FOR PHARMACY ASSISTANTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Red Deer Community College (Length of program: 1 year)			
Enrolments:	23	27	31
Graduates:	20	24	24

[1] Source: Alberta Health and Social Services Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs:

There were no continuing education programs for pharmacy assistants in Alberta in 1983.

PHYSICIANS

I. OVERVIEW

Definition: The work of physicians is concerned with preventing, diagnosing and treating human illnesses. Activities include: conducting medical examinations, making diagnoses, prescribing and giving treatment for diseases, disorders and injuries of the human body and applying preventive medicine as well as rehabilitative techniques; performing surgical operations in the treatment of injuries, diseases and disorders of the human body and engaging in clinical research within the field of activities and scope of competence.

(Source: No. 3111, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

In 1983 there were 3,315 physicians registered with the College of Physicians and Surgeons in Alberta.[1] Of these physicians, 54 percent were general practitioners and 46 percent were specialists.

About 73 percent of the province's physicians were located in the Census Metropolitan Areas of Edmonton and Calgary. Approximately 12 percent of the physicians were located in communities with a population of between 10,000 and 60,000. About 4 percent of the physicians were located in communities with a population of between 5,000 and 10,000; and another 11 percent of the physicians were located in communities with less than 5,000 population. The number of physicians registered in Alberta increased by 7.6 percent between 1981 and 1983. The physician-to-population ratio was 1:711 in 1983.

---

[1] Number of physicians fully registered with the College of Physicians and Surgeons and residing in Alberta as of December 31, 1983. Excludes retired and life members and members on the special, courtesy, or education registries.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Medical Association
#304, 9901 - 108 Street
Edmonton, Alberta
T5K 1G8

Executive Director: Dr. R. Clark

b) Licensing, Registration, or Certification Authority:

College of Physicians and Surgeons of Alberta
9901 - 108 Street
Edmonton, Alberta
T5K 1G8

Registrar: Dr. L. H. LeRiche

c) Legislation:

Under the authority of The Medical Profession Act, all individuals who wish to practice as physicians or osteopaths must register with the College of Physicians and Surgeons of Alberta. Annual re-registration with the College is required of all physicians in order to continue to practice in Alberta.

The College of Physicians and Surgeons of Alberta is responsible for regulating the conduct and discipline of physicians and osteopaths. The Medical Profession Act sets the basic educational qualifications required for registration with the College. However, the College sets the post-basic educational qualifications required for registration as a medical specialist. The College also prescribes the educational qualifications and conditions of practice of physicians registered on its special registries.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PHYSICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	56	56,900	1: 1,016
2 (Lethbridge)	145	115,000	1: 793
3 (Pincher Creek)	36	36,700	1: 1,019
4 (Hanna)	9	12,400	1: 1,378
5 (Drumheller)	25	39,300	1: 1,572
6 (Calgary)[3]	50	96,508	1: 1,930
7 (Stettler)	29	40,500	1: 1,397
8 (Red Deer)	152	129,700	1: 853
9 (Banff)	24	22,900	1: 954
10 (Camrose)	65	80,100	1: 1,232
11 (Edmonton)[4]	71	121,444	1: 1,710
12 (Fort McMurray)	72	88,500	1: 1,229
13 (Whitecourt)	42	55,100	1: 1,312
14 (Hinton)	15	26,200	1: 1,747
15 (Grande Prairie)	100	132,500	1: 1,325
Census Metropolitan Area of Edmonton	1,382	682,056[5]	1: 494
Census Metropolitan Area of Calgary	1,042	620,692[5]	1: 596
PROVINCIAL TOTAL	3,315	2,356,500	1: 711

---

[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1983. Excludes retired and life members, and members on the special, courtesy, or education registries.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 1B NUMBER OF PHYSICIANS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1983

Community By Size	Number Registered[1]	Population[2]	Physician-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	1,042	620,692	1: 596
Census Metropolitan Area of Edmonton	1,382	682,056	1: 494
Between 10,000 and 60,000			
Airdrie	3	10,431	1: 3,477
Camrose	21	12,809	1: 610
Fort McMurray	28	34,494	1: 1,232
Grande Prairie	39	24,076	1: 617
Leduc	14	12,471	1: 891
Lethbridge	117	58,086	1: 496
Medicine Hat	52	41,493	1: 798
Red Deer	96	50,257	1: 524
Spruce Grove	11	11,307	1: 1,028
Wetaskiwin	17	10,022	1: 590
Between 5,000 and 10,000			
Brooks	10	9,421	1: 942
Drumheller	11	6,671	1: 606
Edson	7	7,329	1: 1,047
High River	9	5,049	1: 561
Hinton	8	8,825	1: 1,103
Innisfail	9	5,444	1: 605
Lacombe	8	5,954	1: 744
Lloydminster	12	9,226	1: 769
Peace River	10	6,043	1: 604
Ponoka	20	5,221	1: 261
Stettler	8	5,136	1: 642
Stony Plain	8	5,291	1: 661
Taber	7	5,988	1: 855
Vegreville	5	5,251	1: 1,050
Whitecourt	4	5,408	1: 1,352
Under 5,000	375	692,049	1: 1,845
TOTAL	3,315	2,356,500	1: 711

---

[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1983. Excludes retired and life members, and members on the special, courtesy, or education registries.

[2] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSICIANS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	3,080	3,317	3,315
% Change in Number of Registered Personnel	6.3%	7.7%	0.0%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 727	1: 700	1: 711
- Western Canada[3]	1: 583	1: 573	1: 571
- Canada[4]	1: 538	1: 523	-

[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and resided in Alberta as of December 31, 1983. Excludes out-of-province, retired and life members and members on the special, courtesy, or education registries.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Manitoba Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[4] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Alberta has two medical schools which are located at the University of Alberta and the University of Calgary. The program at the University of Alberta is four years in length, based on a nine-month academic year; the University of Calgary program is three years in length, based on a 12-month academic year. The basic entry requirement to both programs is the successful completion of a two-year pre-medicine program. There were 186 graduates from the two medical schools in 1982-83.

With respect to post-graduate medical training, the Department of Hospitals and Medical Care establishes the number of funded inter/residency positions with the co-operation of the two medical schools. The medical schools, in co-operation with teaching hospitals in Edmonton and Calgary, then apportion the total funded positions among the various medical specialties. During academic year 1983-84, 659 full-time equivalent intern/residency positions in Alberta teaching hospitals were funded by the Department of Hospitals and Medical Care.

Alberta has a two-year pre-licensure requirement. Post-graduate medical students pursuing a specialty certification must write and pass the certifying examinations at the Royal College of Physicians and Surgeons of Canada and complete an approved residency training period in an accredited teaching hospital.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSICIANS IN ALBERTA[1]

	1980-81	1981-82	1982-83
University of Alberta (Length of program: 4 years)			
Enrolments:			
1st Year	118	118	120
2nd Year	117	117	116
3rd Year	122	117	117
4th Year	109	122	118
Graduates:	109	121	118
University of Calgary (Length of program: 3 years)			
Enrolments:			
1st Year	73	72	75
2nd Year	71	73	71
3rd Year	75	72	70
Graduates:	74	72	68
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Enrolments:			
1st Year	191	190	195
2nd Year	188	190	187
3rd Year	197	189	187
4th Year[2]	109	122	118
Graduates:	183	193	186

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] Enrolments in the fourth year apply only to the University of Alberta students as the program at the University of Calgary is three years in length.

b) Continuing Education Programs:

The Faculties of Medicine at the University of Alberta and the University of Calgary offered continuing medical education programs for physicians in Alberta in 1983. In addition, the Alberta Medical Association offered some continuing education programs for its members.

APPENDIX

PHYSICIANS BY SPECIALTY AND PHYSICIAN-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1983[1]

Specialty	Number of Physicians	Physician-to-Population Ratio
Anaesthesia	127	1: 18,555
Anatomical Pathology	25	1: 94,260
Cardiology	22	1: 107,114
Cardiovascular & Thoracic Surgery	14	1: 168,321
Community Medicine	10	1: 235,650
Dermatology	19	1: 124,026
Gastroenterology	9	1: 261,833
General Pathology	59	1: 39,941
General Surgery	165	1: 14,282
Haematological Pathology	3	1: 785,500
Haematology	5	1: 471,300
Immunology	1	1:2,356,500
Internal Medicine	249	1: 9,464
Medical Biochemistry	3	1: 785,500
Microbiology	6	1: 392,750
Neurology	24	1: 98,188
Neuropathology	3	1: 785,500
Neurosurgery	14	1: 168,321
Nuclear Medicine	5	1: 471,300
Obstetrics & Gynaecology	115	1: 20,491
Ophthalmology	59	1: 39,941
Orthopaedic Surgery	63	1: 36,254
Otolaryngology	32	1: 732,641
Pediatrics	122	1: 19,316
Pediatric Cardiology	1	1:2,356,500
Pediatrics General Surgery	4	1: 589,125
Physical Medicine & Rehabilitation	10	1: 235,650
Plastic Surgery	24	1: 98,188
Psychiatry	128	1: 18,410
Radiation Oncology	23	1: 102,457
Radiology - Diagnostic	126	1: 18,702
Respiratory Medicine	9	1: 261,833
Rheumatology	7	1: 336,643
Thoracic Surgery	1	1:2,356,500
Urology	32	1: 73,641
Specialty Total	1,517	1: 1,553
General Practice	1,798	1: 1,311
GRAND TOTAL	3,315	1: 711

---

[1] Source: College of Physicians and Surgeons of Alberta.

PHYSIOTHERAPISTS

I. OVERVIEW

Definition: Plan and carry out programs of physical treatment, in consultation with physicians and other health care workers, to rehabilitate injured or disabled patients. Administer muscle, nerve, joint and functional ability tests to identify physical problems of patient. Assess patient's symptoms and capabilities. Direct and aid patients individually or in groups, in activities designed to assist in muscle restoration and joint mobility. Guide patient in remedial activities involving use of parallel bars, weights, traction and other equipment. Gives whirlpool and contrast baths and applies moist packs. Administer treatments, using diathermy, ultrasonic and microwave machines, infra-red and ultra-violet lamps, low-voltage generators and other electrotherapeutic equipment. Instructs patients and their families in procedures to be continued at home. Record treatments given and patient's response and progress.

(Source: No. 3137, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Association of Chartered Physiotherapists of Alberta (A.C.P.A.) is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 669 practicing physiotherapists in Alberta.[1] About 74 percent of the practising physiotherapists were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial physiotherapist-to-population ratio was 1: 3,522 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel in Alberta," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Physiotherapy Association
108, Seven Persons Drive S.W.
Medicine Hat, Alberta
T1B 2A5

President: Ms. Cheryl Birch

b) Licensing, Registration, or Certification Authority:

Association of Chartered Physiotherapists of Alberta
2nd Floor, 10444 - 82 Avenue
Edmonton, Alberta
T6E 2A2

Chairman: Ms. Marion Briggs

c) Legislation:

No legislation exists in Alberta requiring mandatory registration of physiotherapists practicing in the province. However, under the authority of the Chartered Physiotherapists Act, all individuals who wish to use the title "Chartered Physiotherapist" must register with the Association of Chartered Physiotherapists of Alberta. Annual re-registration with the Association is required of all physiotherapists in order to continue using the title "Chartered Physiotherapist."

The A.C.P.A. is responsible for regulating the conduct of its members and for maintaining professional discipline. The Council of the Association of Chartered Physiotherapists of Alberta sets the educational qualifications required for registration with the A.C.P.A. All members of the Canadian Physiotherapists Association and graduates in physiotherapy from Canadian universities are eligible for membership in the A.C.P.A. Others must apply to the Universities Coordinating Council for examination of qualifications for membership in the Association.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PHYSIOTHERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	13	56,900	1: 4,377
2 (Lethbridge)	28	115,000	1: 4,107
3 (Pincher Creek)	5	36,700	1: 7,340
4 (Hanna)	1	12,400	1: 12,400
5 (Drumheller)	5	39,300	1: 7,860
6 (Calgary)[3]	18	96,508	1: 5,362
7 (Stettler)	6	40,500	1: 6,750
8 (Red Deer)	37	129,700	1: 3,505
9 (Banff)	3	22,900	1: 7,633
10 (Camrose)	14	80,100	1: 5,721
11 (Edmonton)[4]	6	121,444	1: 20,241
12 (Fort McMurray)	12	88,500	1: 7,375
13 (Whitecourt)	11	55,100	1: 5,009
14 (Hinton)	4	26,200	1: 6,550
15 (Grande Prairie)	13	132,500	1: 10,192
Census Metropolitan Area of Edmonton	305	682,056[5]	1: 2,236
Census Metropolitan Area of Calgary	188	620,692[5]	1: 3,302
PROVINCIAL TOTAL	669	2,356,500	1: 3,522

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel in Alberta," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSIOTHERAPISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	534[1]	634[2]	669[3]
% Change in Number of Practicing Personnel	9.7%	18.7%	5.5%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 4,190	1: 3,664	1: 3,522
- Western Canada[5]	1: 2,961	-	1: 2,783
- Canada[6]	1: 4,309	1: 4,243	-

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Manitoba Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branchs, Saskatchewan Department of Health, Regina, Saskatchewan. The figures for British Columbia, Saskatchewan, and Manitoba refer to personnel registered with the respective associations, whereas the data for Alberta refer to the number of practicing personnel.

[6] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to 1977, both a three-year diploma program and a four-year baccalaureate degree program in physical therapy were offered at the University of Alberta. Only the four-year baccalaureate degree program is now offered at the University of Alberta. In 1982-83 there were 56 graduates from the program.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSIOTHERAPISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
University of Alberta (Length of program: 4 years)			
Enrolments:			
1st Year	40	42	45
2nd Year	40	39	37
3rd Year	33	35	34
4th Year[2]	58	69	55
Graduates:	47	51	56

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] Increases in the fourth year enrolments were due to graduates of the diploma program returning to complete the baccalaureate degree program. In 1980-81, there were 40 full-time students and 18 part-time students. In 1981-82, there were 40 full-time students and 29 part-time students. In 1982-83 there were 40 full-time students and 15 part-time students.

b) **Continuing Education Programs:**

The Department of Physiotherapy at the University of Alberta offers a baccalaureate program for physiotherapists wishing to upgrade their educational qualifications.

In addition, those persons wishing to re-enter the profession after a prolonged period of absence may apply to the A.C.P.A for information regarding refresher courses. While completion of refresher courses prior to re-entering the work force is not mandatory, the A.C.P.A. strongly recommends that physiotherapists returning to work following a prolonged absence avail themselves of opportunities to refresh theoretical and practical knowledge.

The University of Calgary offered a number of continuing education courses in 1983.

PODIATRISTS

I. OVERVIEW

Definition: A Podiatrist treats ailments, diseased conditions, deformities or injuries of the human foot and the leg muscles controlling the foot; examines, diagnoses and treats such ailments, conditions, deformities or injuries but does not treat systemic diseases of bones, muscles or ligaments, or does not use X-ray equipment for purposes other than diagnostic, or does not use anaesthetics other than local.

(Source: the Podiatry Act, 1964, Ch. 69, S. 2; 1968, Ch. 78, S. 2)

In 1983 there were 18 podiatrists registered with the Alberta Podiatry Association (A.P.A.) in Alberta. All of the podiatrists were residing in the Census Metropolitan Areas of Edmonton and Calgary and the cities of Lethbridge and Medicine Hat. The number of podiatrists registered in Alberta increased by 5 between 1981 to 1983. The provincial podiatrist-to-population ratio was 1:130,917 in 1983.

---

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1983.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Podiatry Association
c/o Dr. R.J .Gorman
11528 Jasper Avenue
Edmonton, Alberta
T5K 0M8

President: Dr. R.J. Gorman

b) Licensing, Registration, or Certification Authority:

Board of Examiners for Podiatry
c/o Professions and Occupations
8th Floor, West Tower
Devonian Building
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

and

Alberta Podiatry Association
c/o Dr. R.J. Gorman
11528 Jasper Avenue
Edmonton, Alberta
T5K 0M8

c) Legislation:

Under the authority of the Podiatry Act, all individuals who wish to practice as podiatrists in the province must apply to the Board of Examiners for Podiatry, a provincial government certification body. If an individual is eligible the Board issues a certificate of approval for registration. Successful applicants must register with the A.P.A. Annual re-registration with the Association is required of all podiatrists in order to continue to practice in Alberta.

The A.P.A. is responsible for regulating the conduct and discipline of its members. The Board of Examiners for Podiatry sets the educational qualifications required for registration with the A.P.A.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PODIATRISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	56,900	1: 56,900
2 (Lethbridge)	1	115,000	1:115,000
Census Metropolitan Area of Edmonton	6	682,056[3]	1:113,676
Census Metropolitan Area of Calgary	10	620,692[3]	1: 62,069
Other Census Divisions	0	881,852	-
PROVINCIAL TOTAL	18	2,356,500	1:130,917

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1983.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PODIATRISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	13	16	18
% Change in Number of Registered Personnel	0.0%	23.1%	12.5%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1:172,133	1:145,168	1:130,917
- Western Canada[3]	1: 99,643	-	-
- Canada[4]	1: 94,646	1: 84,894	-

---

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1981, 1982 and 1983.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[4] Source: Canada Health Manpower Inventory, 1983. Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no training programs for podiatrists in Canada. The United States has five schools of podiatry which offer four-year training programs in podiatry following two years of university preparation. Most of Alberta's podiatrists were trained in the United States.

b) Continuing Education Programs:

The Alberta Podiatry Association provided continuing education programs for podiatrists through lectures presented at the Association's semi-annual meetings and annual regional conventions in 1983. There were also various seminars, workshops, clinics, lectures, and conventions held in the United States, which the province's podiatrists frequently attend.

PROSTHETISTS AND ORTHOTISTS

I. Overview

Definition: Design, build, fit and repair prosthetic and orthotic appliances to correct physical defects of human body. Interpret physician's specifications for prosthesis (artificial limb) or orthosis (support or brace). Measure patient for appliance. Design or draw working sketch or model of prosthesis or orthosis required. Build or direct other workers to build prosthetic or orthotic appliance, using materials, such as plastic, wood, leather, steel, aluminium and padding and machine- and hand-tools. Fit patient with appliance and add or remove padding, adjust parts and change tension to achieve maximum comfort and optimum function. Revise working sketch to reflect changes and direct other workers to modify appliance. Advise patient in application, use and care of appliance. Service and repair appliance as necessary.

(Source: No. 3159, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Association of Prothetists and Orthotists is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 25 prosthetists and orthotists practicing in Alberta.[1] All of these personnel were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial prosthetist/orthotist-to-population ratio was 1:94,260 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Prosthetists and Orthotists
c/o Prosthetic and Orthotic Department
Calgary General Hospital
841 Centre Avenue East
Calgary, Alberta
T2E 0A1

President: Mr. Alex Calder

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

Currently, in Alberta, there is no legislation regulating prosthetists and orthotists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PROSTHETISTS AND ORTHOTISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS METROPOLITAN AREA, ALBERTA, 1983

Census Metropolitan Area	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Census Metropolitan Area of Edmonton	16	682,056[3]	1: 42,629
Census Metropolitan Area of Calgary	9	620,692[3]	1: 68,966
PROVINCIAL TOTAL	25	2,356,500	1: 94,260

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1984.

[3] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PROSTHETISTS AND ORTHOTISTS IN ALBERTA, 1981, 1982, and 1983

	1981	1982	1983
Number of Practicing Personnel	19[1]	23[2]	25[3]
% Change in Number of Practicing Personnel	-9.5%	21.0%	8.7%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratio:			
- Alberta	1:117,775	1:100,987	1: 94,260
- Western Canada[5]	1:101,087	-	-

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services, Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for prosthetists and orthotists in Alberta. Although most of the prosthetists and orthotists in the province are trained on-the-job, in 1980 Alberta made an inter-provincial training agreement with the British Columbia Institute of Technology and the Government of British Columbia to purchase two training places per year in 1980, 1982, and 1984 in the two-year program for prosthetists and orthotists at the British Columbia Institute of Technology.

b) Continuing Education Programs:

One continuing education program was offered in 1983. It concerned an alternative prosthetic and orthotic technique as practiced in Germany.

PSYCHIATRIC NURSES

I. OVERVIEW

Definition: Provide nursing care to patients with mental and emotional problems in hospitals and clinics or in private homes. Administer prescribed medications and treatments and attend to total nursing care of assigned patients. Observe, record and report symptoms and changes in patient's condition. Confer with psychiatrists, psychologists, social workers, occupational therapists and other specialists to evaluate patient's condition and to plan therapy. Encourage patients to participate in routine work functions and recreational, community and other activities to build up self-confidence and to develop relationships with others. Counsel patients at home or in clinic and evaluate patient's adjustment in community.

(Source: No. 3131, Canadian Classifications and Dictionary of Occupations, 1980 - Revision)

Since registration with the Psychiatric Nurses Association of Alberta is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 701 practicing psychiatric nurses in Alberta.[1] About 76 percent of the practicing psychiatric nurses were employed in the Town of Ponoka in Census Division 8 and in the Census Metropolitan Area of Edmonton, primarily at Alberta's two psychiatric hospitals. The provincial psychiatric nurse-to-population ratio was 1: 3,362 in 1983. Some of the services provided by psychiatric nurses were also provided by registered nurses (see chapter on Registered Nurses).

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Psychiatric Nurses Association of Alberta
P. O. Box 755
Ponoka, Alberta
TOC 2HO

Executive Director: Mr. E.S. Neufeldt

b) Licensing, Registration, or Certification Authority:

Advisory Committee of the Psychiatric
Nursing Training Act
c/o Professions and Occupations
8th Floor, West Tower
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

c) Legislation:

The Psychiatric Nursing Training Act restricts the practice of psychiatric nursing to persons certified by the Advisory Committee of the Psychiatric Nursing Training Act and to registered or graduate nurses.[1]

Registration with the Psychiatric Nurses Association of Alberta is voluntary. To maintain active membership an individual must have practiced psychiatric nursing at least one full year in the preceeding five years.

---

[1] Family members of a mentally ill person, people employed as domestics who do not hold themselves out to be psychiatric nurses or registered nursing assistants are also exempted under the Act.

The P.N.A.A. is responsible for regulating the conduct and discipline of its members. The Advisory Committee can cancel the certification of a psychiatric nurse if warranted. The Advisory Committee is also responsible for setting the educational qualifications required for certification as a psychiatric nurse. Individuals who have taken required courses of study or equivalent training outside Alberta are eligible for certification.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PSYCHIATRIC NURSES AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	56,900	1: 11,380
2 (Lethbridge)	13	115,000	1: 8,846
3 (Pincher Creek)	12	36,700	1: 3,058
4 (Hanna)	1	12,400	1: 12,400
5 (Drumheller)	0	39,300	-
6 (Calgary)[3]	5	96,508	1: 19,302
7 (Stettler)	0	40,500	-
8 (Red Deer)	169	129,700	1: 767
9 (Banff)	0	22,900	-
10 (Camrose)	23	80,100	1: 3,483
11 (Edmonton)[4]	2	121,444	1: 60,722
12 (Fort McMurray)	5	88,500	1: 17,700
13 (Whitecourt)	1	55,100	1: 55,100
14 (Hinton)	0	26,200	-
15 (Grande Prairie)	10	132,500	1: 13,250
Census Metropolitan Area of Edmonton	365	682,056[5]	1: 1,869
Census Metropolitan Area of Calgary	90	620,692[5]	1: 6,897
PROVINCIAL TOTAL	701	2,356,500	1: 3,362

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PSYCHIATRIC NURSES IN ALBERTA, 1981, 1982, AND 1983

	1980	1981	1982
Number of Practicing Personnel	688[1]	688[2]	701[3]
% Change in Number of Practicing Personnel	-7.5%	0.0%	1.9%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.3%	1.5%
Personnel-to-Population Ratios: - Alberta	1: 3,253	1: 3,376	1: 3,362

---

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Basic education programs for psychiatric nurses in Alberta are offered by two institutions: Alberta Hospital - Edmonton and Alberta Hospital - Ponoka. Both hospital-based programs are two years in length. Before they are eligible for certification, students must pass the provincial examinations which are administered by Dr. V. Nyberg, Department of Educational Psychology, the University of Alberta. There were 49 graduates from the two programs in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PSYCHIATRIC NURSES IN ALBERTA[1]

	1980-81	1981-82	1982-83
Alberta Hospital - Edmonton (Length of program: 2 years)			
Enrolments:			
1st Year	48	39	43
2nd Year	22	37	23
Graduates:	22	33	21
Alberta Hospital - Ponoka (Length of program: 2 years)			
Enrolments:			
1st Year	38	37	30
2nd Year	31	22	35
Graduates:	31	22	28
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Enrolments:			
1st Year	86	76	73
2nd Year	53	59	58
Graduates:	53	55	49

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83. Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs

The two hospital-based schools of psychiatric nursing did not offer continuing education programs for psychiatric nurses in 1983. The Psychiatric Nurses Association of Alberta approved one 8-week refresher program in psychiatric nursing.

PSYCHOLOGISTS

I. OVERVIEW

Definition: A psychologist collects, interprets and applies scientific data for the purpose of investigating psychological phenomena and formulating and applying psychological principles and laws in predicting and controlling behaviour in society.

Studies human behaviour and mental processes and investigates and recommends or provides treatment of psychological problems. Plans and carries out experiments using human beings and animal subjects, observes behaviour, and measures mental and physical characteristics. Analyzes effects of hereditary, and environmental factors on individual thought and behaviour. Undertakes diagnosis, treatment and prevention of personality disorders and problems of maladjustment to social and occupational environment.

(Source: No. 2315, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

In 1983 there were 1,170 certified psychologists registered with the Psychologists Association of Alberta (P.A.A.) in Alberta.[1] Of these, there were 784 certified psychologists employed in the health and social service sector in Alberta in 1983.[2] About 84 percent of the certified psychologists resided in the Census Metropolitan Areas of Edmonton and Calgary. The number of certified psychologists in Alberta increased by 41.1 percent between 1981 and 1983. The provincial certified psychologist-to-population ratio was 1:2,014 in 1983.

---

[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1983. Excludes associate members and student affiliates.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Psychologists Association of Alberta
5-157 Education Building II
The University of Alberta
Edmonton, Alberta
T6G 2E1

President: Dr. J.A. Browne

b) Licensing, Registration, or Certification Authority:

Psychologists Association of Alberta
5-157 Education Building II
The University of Alberta
Edmonton, Alberta
T6G 2E1

c) Legislation:

Under the authority of The Psychologists Act, all individuals who wish to practice as certified psychologists or psychologists must register with the Psychologists Association of Alberta (P.A.A.). Annual re-registration with the P.A.A. is required of all certified psychologists in order to continue to practice in Alberta. However, actual membership in the P.A.A. is voluntary.

The P.A.A. is responsible for the conduct and discipline of members and certified psychologists. In addition, the Association sets the basic educational qualifications required for membership. Assessment and approval of academic qualifications for registration as a certified psychologist are performed by the Office of Professional Examinations, the Universities Coordinating Council.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PSYCHOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	56,900	1: 8,129
2 (Lethbridge)	37	115,000	1: 3,108
3 (Pincher Creek)	7	36,700	1: 5,243
4 (Hanna)	0	12,400	-
5 (Drumheller)	5	39,300	1: 7,860
6 (Calgary)[3]	17	96,508	1: 5,677
7 (Stettler)	3	40,500	1:13,500
8 (Red Deer)	54	129,700	1: 2,402
9 (Banff)	3	22,900	1: 7,633
10 (Camrose)	5	80,100	1:16,020
11 (Edmonton)[4]	20	121,444	1: 6,072
12 (Fort McMurray)	13	88,500	1: 6,808
13 (Whitecourt)	5	55,100	1:11,020
14 (Hinton)	3	26,200	1: 8,733
15 (Grande Prairie)	14	132,500	1: 9,464
Census Metropolitan Area of Edmonton	531	682,056[5]	1: 1,284
Census Metropolitan Area of Calgary	446	620,692[5]	1: 1,391
PROVINCIAL TOTAL	1,170	2,356,500	1: 2,014

[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1983. Excludes associate members and student affiliates.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PSYCHOLOGISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	829	1,029	1,170
% Change in Number of Registered Personnel	8.7%	24.1%	13.7%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 2,699	1: 2,257	1: 2,014
- Canada[3]	-	1: 3,930	-

---

[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1981, 1982, and 1983. Excludes associate members and student affiliates.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Alberta has six masters programs in psychology: the Masters of Science program at the University of Calgary, the Masters of Arts and Masters of Science programs at the University of Alberta, the Masters of Education program in Educational Psychology at the Universities of Alberta and Calgary and the Masters of Science program in Educational Psychology at the University of Calgary. In 1982-83, there were 64 graduates from these six programs.

In addition, the University of Alberta and the University of Calgary have Ph.D. programs in both psychology and educational psychology. There were 27 graduates from these four doctoral programs in 1982-83.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
A. **MASTERS PROGRAMS**			
University of Alberta Masters of Arts in Psychology (Length of program: variable)			
Enrolments:[2]	9	6	5
Graduates:	4	0	2
University of Alberta Masters of Science in Psychology (Length of program: variable)			
Enrolments:[2]	15	12	13
Graduates:	3	5	3

TABLE 3 (cont'd)

	1980-81	1981-82	1982-83
University of Alberta Masters of Education in Educational Psychology (Length of program: variable)			
Enrolments:[2]	144	181	186
Graduates:	28	19	31
University of Calgary Masters of Science in Psychology (Length of program: variable)			
Enrolments:[2]	18	20	26
Graduates:	9	3	3
University of Calgary Masters of Education in Educational Psychology (Length of program: variable)			
Enrolments:[2]	35	62	67
Graduates:	8	18	7
University of Calgary Masters of Science in Educational Psychology (Length of program: variable)			
Enrolments:[2]	28	67	60
Graduates:	18	16	18
PROVINCIAL TOTAL:			
Number of Masters Programs: 6			
Enrolments:[2]	249	273	359
Graduates:	70	61	64

TABLE 3 (cont'd)

	1980-81	1981-82	1982-83
B. DOCTORAL PROGRAMS			
University of Alberta Ph.D. In Psychology (Length of program: variable)			
Enrolments:[2]	21	16	17
Graduates:	6	1	6
University of Alberta Ph.D. in Educational Psychology (Length of program: variable)			
Enrolment:[2]	92	88	107
Graduates:	20	12	16
University of Calgary Ph.D. in Psychology (Length of program: variable)			
Enrolments:[2]	17	18	13
Graduates:	2	1	1
University of Calgary Ph.D. in Educational Psychology (Length of program: variable)			
Enrolments:[2]	16	36	38
Graduates:	7	6	4
PROVINCIAL TOTAL			
Number of Ph.D. Programs: 4			
Enrolments:[2]	146	132	175
Graduates:	35	20	27

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] Enrolment figures include both full-time and part-time students.

b) Continuing Education Programs:

Continuing education courses in psychology were offered through the Faculties of Extension at the University of Alberta and the University of Calgary in 1983. In addition, the Psychologists Association of Alberta offered some workshops and conferences for its members.

PUBLIC HEALTH INSPECTORS

I. OVERVIEW

Definition:	To effect compliance with laws and regulations governing health standards, and to achieve this end, perform any combination of the following duties: Locate persons suspected of exposure to communicable disease; interview persons exposed to communicable disease to secure information on possible contacts; advise contacts to seek medical treatment. Inspect food and seize and dispose of any food or animal injurious to health. Inspect food establishments, housing, water supplies, sewage disposal sites, waste disposal sites, recreational areas, and other public places. Take samples of food, water, and air, and order chemical, physical, biological, and bacteriological tests as appropriate, and interpret test results. Carry out procedures to ensure permits required by law are held. Initiate measures to control animal and insect vectors. Promote health through information and education programs. (Source: Canadian Institute of Public Health Inspectors)

Since registration with the Canadian Institute of Public Health Inspectors is not mandatory, the employer survey conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 135 practicing public health inspectors in Alberta.[1] About 51 percent of the practising public health inspectors were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial public health inspector-to-population ratio was 1:17,456 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Canadian Institute of Public Health Inspectors
(Alberta Branch)
#101, 5421 - 11 Street N.E.
Calgary, Alberta
T2E 6M4

Secretary/Treasurer, Alberta Branch: Mr. Alexander Mackenzie

b) Licensing, Registration, or Certification Authority:

Board of Certification of Public Health Inspectors
Ottawa-Carleton Regional Health Unit
P.O. Box 5367, Station "S"
Ottawa, Ontario
K2C 3J1

Board Chairman: Mr. Phillip Barton, C.P.H.I.(C)

c) Legislation:

Public health inspectors in Alberta are regulated under The Public Health Act. According to The Public Health Act, all individuals who wish to practice as public health inspectors must be certified by the Board of Certification of Public Health Inspectors which is administered by the Canadian Institute of Public Health Inspectors. This requirement does not apply to persons who became public health inspectors prior to January 1, 1961 and who have continued in such positions since that date.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PUBLIC HEALTH INSPECTORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	56,900	1:14,225
2 (Lethbridge)	7	115,000	1:16,429
3 (Pincher Creek)	2	36,700	1:18,350
4 (Hanna)	2	12,400	1: 6,200
5 (Drumheller)	2	39,300	1:19,650
6 (Calgary)[3]	3	96,508	1:32,169
7 (Stettler)	3	40,500	1:13,500
8 (Red Deer)	7	129,700	1:18,529
9 (Banff)	2	22,900	1:11,450
10 (Camrose)	4	80,100	1:20,025
11 (Edmonton)[4]	7	121,444	1:17,349
12 (Fort McMurray)	6	88,500	1:14,750
13 (Whitecourt)	4	55,100	1:13,775
14 (Hinton)	3	26,200	1: 8,733
15 (Grande Prairie)	10	132,500	1:13,250
Census Metropolitan Area of Edmonton	38	682,056[5]	1:17,949
Census Metropolitan Area of Calgary	31	620,692	1:20,022
PROVINCIAL TOTAL	135	2,356,500	1:17,456

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2

SELECTED MANPOWER STATISTICS FOR
PUBLIC HEALTH INSPECTORS
IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered or Practising Personnel	120[1]	131[2]	135[3]
% Change in Number of Registered or Practising Personnel	14.3%	9.2%	3.1%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1:18,648	1:17,730	1:17,456
- Western Canada[5]	-	1:15,604	-
- Canada[6]	1:25,429	1:26,260	-

---

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel", Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[6] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for public health inspectors in Alberta. The British Columbia Institute of Technology in Vancouver, the Ryerson Polytechnical Institute in Toronto, and College Regional Bourghemin in St. Hyacinthe, Quebec offer two-year diploma programs in public health inspection. In addition, Ryerson Polytechnical Institute offers a four-year baccalaureate degree program in environmental health.

b) Continuing Education Programs:

There were no continuing education programs for public health inspectors in Alberta in 1983.

RADIOLOGICAL TECHNICIANS

I. OVERVIEW

Definition: Radiological Technicians (Diagnostic)

Operate radiography equipment to produce pictures of body structures for diagnostic purposes. Explain treatment and reassure patients. Prepare drugs and chemicals for radiologist. Position patient according to part of body being x-rayed. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam, to regulate length and intensity of x-ray exposure and to expose film. Process and prepare films for interpretation by radiologist. Assist radiologist in fluoroscopy, cinefluoroscopy and other diagnostic procedures. Operate radiography equipment in operating theater or other specialized area to assist physician or surgeon.

(Source: No. 3155, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Radiological Technicians (Therapy)

Administer radiation treatment to patients as prescribed by radiation oncologist. Explain treatment and reassure patients. Position patient according to part of body being treated. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam. Observe patient through window or on closed circuit television during treatment. Notify radiation onologist if medical problems arise. Assist clinical physicist to prepare patient's treatment plan according to radiation oncologist's prescription. Process or assist in preparation of sealed radioactive substances for surface application or insertion into body cavities.

(Source: No. 3155, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Nuclear Medicine Technicians

Prepare radioactive solutions and reagents and operates scanning equipment for diagnostic purposes. Perform assays and quality-control tests on radioactive materials. Calculate doses to be administered by physician. Position patient and calibrate scanning equipment. Operate radiation-scanning equipment to produce photographic image of irradiated area. Calculate blood volume and red-cell survival, using

> geiger counter, electroscope, scaler, scintillation and position scanner and scintogram. Monitor oscilloscope images and study photographic images to determine if further scanning is required. Perform radioisotope scanning of pathological specimens and blood samples.
>
> (Source: No. 3155, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Association of Medical Radiation Technologists (A.A.M.R.T.) is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 871 radiological technicians practicing in Alberta:[1] 777 of these were radiological technicians (diagnostic), 36 were radiological technicians (therapy), and 58 were nuclear medicine technicians. Seventy-three percent of all radiological technicians were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial radiological technician-to-population ratio was 1: 2,706 in 1983.

Some of the basic x-ray services provided by radiological technicians were also provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Medical Radiation Technologists
1521 - 13 Street South
Lethbridge, Alberta
T1K 1T4

National Director: Ms. Georgina C. Poulsen, RT, AC

b) Licensing, Registration, or Certification Authority:

Medical Radiological Technicians Board
(not currently operating)

c) Legislation:

Under the authority of The Radiological Technicians Act, all individuals who wish to practice as medical radiological technicians, must register with the Medical Radiological Technicians Board, a provincial government licensing body. Annual re-registration with the Board is required of all medical radiological technicians in order to continue to practice in Alberta.

The Board is responsible for regulating the conduct and discipline of all radiological technicians. The Board also sets the educational qualifications required for registration as a medical radiological technician.

However, the Medical Radiological Technicians Board has not been active for a number of years. Therefore, the above-mentioned provision of The Medical Radiological Technicians Act is not currently in effect.

On June 6, 1983 medical radiation technologists were designated under the Health Occupations Act. The Minister Responsible for Professions and Occupations will establish a health occupations committee for medical radiation technologists. This committee will be responsible for preparing draft regulations for this occupation to be presented to the Health Occupations Board.

III. PERSONNEL DATA

TABLE 1 NUMBER OF RADIOLOGICAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	56,900	1: 5,173
2 (Lethbridge)	39	115,000	1: 2,949
3 (Pincher Creek)	10	36,700	1: 3,670
4 (Hanna)	1	12,400	1: 12,400
5 (Drumheller)	4	39,300	1: 9,825
6 (Calgary)[3]	13	96,508	1: 7,424
7 (Stettler)	9	40,500	1: 4,500
8 (Red Deer)	40	129,700	1: 3,243
9 (Banff)	8	22,900	1: 2,863
10 (Camrose)	17	80,100	1: 4,712
11 (Edmonton)[4]	18	121,444	1: 6,747
12 (Fort McMurray)	23	88,500	1: 3,848
13 (Whitecourt)	9	55,100	1: 6,122
14 (Hinton)	5	26,200	1: 5,240
15 (Grande Prairie)	25	132,500	1: 5,300
Census Metropolitan Area of Edmonton	377	682,056[5]	1: 1,809
Census Metropolitan Area of Calgary	262	620,692[5]	1: 2,369
PROVINCIAL TOTAL	871	2,356,500	1: 2,706

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RADIOLOGICAL TECHNICIANS IN ALBERTA 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	685[1]	734[2]	871[3]
% Change in Number Practicing Personnel	13.6%	7.2%	18.7%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 3,267	1: 3,164	1: 2,706
- Western Canada[5]	1: 2,630	-	-
- Canada[6]	1: 2,538	1: 2,649	-

---

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel, "Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[6] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A person who wishes to become a radiological technician can obtain training in one of three areas, namely, radiography, radiotherapy, and nuclear medicine. Seven training hospitals in Calgary, Edmonton, and Red Deer, in conjunction with the Northern Alberta Institute of Technology, offer a two-year medical x-ray technology diploma program in radiography. In 1982-83, there were 55 graduates from the program.

Both the Cross Cancer Institute in Edmonton and the Calgary Cancer Clinic offer training programs in therapeutic radiology which are 27 months in length.

Provincial training programs in nuclear medicine are offered by the University of Alberta Hospital and Foothills Hospital in conjunction with the Southern Alberta Institute of Technology. The program is two years in length.

TABLE 3 BASIC EDUCATION PROGRAMS FOR RADIOLOGICAL TECHNICIANS IN ALBERTA[1]

	1980-81	1981-82	1982-83
A. PROGRAM IN RADIOGRAPHY			
Northern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:			
1st Year	45	59	59
2nd Year	53	41	56
Graduates:	53	39	55

TABLE 3 (cont'd)

	1980-81	1981-82	1982-83
B. PROGRAMS IN THERAPEUTIC RADIOLOGY			
Cross Cancer Institute (Length of program: 27 months)			
Enrolments:			
1st Year	4	5	3
2nd Year	3	4	4
Graduates:	2	3	3
Tom Baker Cancer Centre (Length of program: 27 months)			
Enrolments:			
1st Year	0	3	4
2nd Year	2	0	2
Graduates:	2	0	2
PROVINCIAL TOTAL			
Number of Programs in Radiotherapy: 2			
Enrolments:			
1st Year	4	8	7
2nd Year	5	4	6
Graduates:	4	3	5
C. PROGRAM IN NUCLEAR MEDICINE			
Southern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:			
1st Year	11	14	16
2nd Year	9	8	10
Graduates:	4	8	8

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs:

There were no continuing education programs for radiological technicians offered by educational institutions in Alberta in 1983.

However, the A.A.M.R.T. offered continuing education courses four times a year which were either weekend seminars or week-long sessions. The Association also provided three-day continuing education courses in conjunction with its annual conference.

In addition, the Canadian Association of Medical Radiation Technologists offered a series of week-long continuing education courses in conjunction with its Annual General Meeting.

RECREATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan, organize and direct program of recreational activities as part of treatment to rehabilitate mentally and physically disabled persons. Assess patient's aptitudes, capabilities, interests and motivations to determine recreational program. Plan program with individuals or groups. Organize, conduct and promote social events. Direct and coordinate games, sports, arts and crafts, drama and sightseeing tours. Train and direct volunteers. Adapt games according to patient's mental and physical abilities. Discuss patient's progress and submit reports. Feed and dress patients and perform other personal care duties, if required.

(Source: No. 3139, Canadian Classification and Dictionary of Occupations, 1981 - Revision)

Since there is no professional association for recreational therapists, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 150 practicing recreational therapists in Alberta.[1] About 65 percent of these personnel were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial recreational therapist-to-population ratio was 1:15,710 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

None.

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

Currently, in Alberta, there is no legislation regulating recreational therapists.

III. PERSONNEL DATA

TABLE 1 NUMBER OF RECREATIONAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	56,900	1: 14,225
2 (Lethbridge)	9	115,000	1:112,778
3 (Pincher Creek)	3	36,700	1: 12,233
4 (Hanna)	0	12,400	-
5 (Drumheller)	1	39,300	1: 39,300
6 (Calgary)[3]	3	96,508	1: 32,169
7 (Stettler)	5	40,500	1: 8,100
8 (Red Deer)	14	129,700	1: 9,264
9 (Banff)	0	22,900	-
10 (Camrose)	4	80,100	1: 20,025
11 (Edmonton)[4]	0	121,444	-
12 (Fort McMurray)	4	88,500	1: 22,125
13 (Whitecourt)	1	55,100	1: 55,100
14 (Hinton)	0	26,200	-
15 (Grande Prairie)	5	132,500	1: 26,500
Census Metropolitan Area of Edmonton	49	682,056[5]	1: 13,920
Census Metropolitan Area of Calgary	48	620,692[5]	1: 12,931
PROVINCIAL TOTAL	150	2,356,500	1: 15,710

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RECREATIONAL THERAPISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	121[1]	151[2]	150[3]
% Change in Number of Practicing Personnel	-4.0%	24.8%	-0.7%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1:18,494	1:15,382	1:15,710

---

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1982.

[3] Source: September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Mount Royal College offers a two-year associate diploma program in therapeutic recreation. In 1982-83, seven students graduated from this program.

TABLE 3 BASIC EDUCATION PROGRAM FOR RECREATIONAL THERAPISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Mount Royal College (Length of program: 2 years)			
Enrolments:[2]			
1st Year	27	26	36
2nd Year	18	13	11
Graduates:	17	13	7

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] The figures include both full-time and part-time students. There were 43 full-time students and 2 part-time students in 1980-81, 32 full-time students and 7 part-time students in 1981-82, and 42 full-time staff and 5 part-time students in 1982-83.

b) Continuing Education Programs:

There were no continuing education programs for recreational therapists in Alberta in 1983.

REGISTERED NURSES

I. OVERVIEW

Definition: Provides total nursing care for patients in hospitals, nursing homes, extended-care facilities and other establishments: Discusses and plans total nursing care of assigned patients with physician and other members of health team. Directs activities of nursing team or performs nursing activities to provide nursing care of patients. Administers prescribed medications and treatments. Observes, records and reports symptoms and changes in patients' condition. Makes nursing rounds and accompanies physician on medical rounds to evaluate needs of individual patients and to assess effectiveness of nursing care. Counsels patient and family in health care and treatment to be continued at home. Directs or carries out established procedures to prepare essential facilities and equipment, and assists physician in examiniations, treatments, surgery and deliveries. Performs nursing activities in obstetrics, paediatrics, orthopaedics and other clinical specializations.

(Source: No. 3131, Canadian Classification and Dictionary of Occupations, 1980 Revision)

In 1983 there were 17,770 nurses registered with the Alberta Association of Registered Nurses (A.A.R.N.) in Alberta.[1] Of these, 14,939 registered nurses were employed in Alberta in 1983.[2] About 64 percent of the registered nurses were residing in the Census Metropolitan Areas of Edmonton and Calgary. The number of nurses registered in Alberta increased by 5.2 percent between 1981 and 1983. The registered nurse-to-population ratio was 1:133 in 1983.

---

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1983. Excludes inactive, honorary, associate, and retired members.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Registered Nurses
10256 - 112th Street
Edmonton, Alberta
T5K 1M6

Executive Director: Ms. Yvonne Chapman

b) Licensing, Registration, or Certification Authority:

Alberta Association of Registered Nurses
10256 - 112th Street
Edmonton, Alberta
T5K 1M6

c) Legislation:

The Nursing Profession Act was introduced in 1983. This legislation, when proclaimed, will replace the Registered Nurses Act. Subject to certain exemptions, the Nursing Profession Act requires all nurses practicing in Alberta to be registered under the Act. Individuals who wish to use the title of "Registered Nurse" must register with the Alberta Association of Registered Nurses (A.A.R.N.).

The Act gives the A.A.R.N. the authority to enter Registered Nurses and Certified Graduate Nurses into the appropriate Registers, and to grant Special Permits and Temporary Permits to others, who wish to practice under the Act.

The Act establishes a Practice Review Committee which has the authority to investigate the desirable standards of competence for nursing practice in general and the competence of particular registered nurses or permit holders. Complaints concerning unskilled practice and professional misconduct by registered nurses or permit holders may be investigated by the Professional Conduct Committee. Educational requirements for registration are established by the Universities co-ordinating Council.

III. PERSONNEL DATA

TABLE 1A NUMBER OF REGISTERED NURSES AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	378	56,900	1: 151
2 (Lethbridge)	873	115,000	1: 132
3 (Pincher Creek)	227	36,700	1: 162
4 (Hanna)	71	12,400	1: 175
5 (Drumheller)	189	39,300	1: 208
6 (Calgary)[3]	409	96,508	1: 236
7 (Stettler)	229	40,500	1: 177
8 (Red Deer)	1,064	129,700	1: 122
9 (Banff)	160	22,900	1: 143
10 (Camrose)	495	80,100	1: 162
11 (Edmonton)[4]	683	121,444	1: 178
12 (Fort McMurray)	484	88,500	1: 183
13 (Whitecourt)	246	55,100	1: 224
14 (Hinton)	91	26,200	1: 288
15 (Grande Prairie)	609	132,500	1: 218
Census Metropolitan Area of Edmonton	6,257	682,056[5]	1: 109
Census Metropolitan Area of Calgary	5,073	620,692[5]	1: 122
Regional Location Unknown	232		
PROVINCIAL TOTAL	17,770	2,356,500	1: 133

---

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1983. Excludes inactive, honorary, associate, and retired members.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 1B

NUMBER OF REGISTERED NURSES AND PERSONNEL-TO-POPULATION RATIO BY COMMUNITY, ALBERTA, 1983

Community by Size	NUMBER REGISTERED[1]	POPULATION[2]	PERSONNEL TO-POPULATION RATIO
Over 60,000			
Census Metropolitan Area of Calgary	5,073	620,692	1: 122
Census Metropolitan Area of Edmonton	6,257	682,056	1: 109
Between 10,000 and 60,000			
Airdrie	66	10,431	1: 158
Camrose	121	12,809	1: 100
Fort McMurray	234	34,494	1: 147
Grande Prairie	193	24,076	1: 125
Leduc	118	12,471	1: 106
Lethbridge	548	58,086	1: 106
Medicine Hat	322	41,493	1: 129
Red Deer	596	50,257	1: 84
Spruce Grove	130	11,307	1: 90
Wetaskiwin	111	10,022	1: 90
Between 5,000 and 10,000			
Brooks	70	9,421	1: 135
Drumheller	44	6,671	1: 152
Edson	39	7,329	1: 188
High River	68	5,049	1: 74
Hinton	48	8,825	1: 184
Innisfail	55	5,444	1: 99
Lacombe	64	5,954	1: 93
Lloydminster	37	9,226	1: 249
Peace River	53	6,043	1: 114
Ponoka	115	5,221	1: 45
Stettler	46	5,136	1: 112
Stony Plain	53	5,291	1: 100
Taber	53	5,988	1: 113
Vegreville	54	5,251	1: 97
Whitecourt	34	5,408	1: 159
Under 5,000	2,936	692,049	1: 238
Regional Location Unknown	232		
TOTAL	17,770	2,356,500	1: 133

---

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1983. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Population Statistics," Municipal Services Branch Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSES IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered Personnel[1]	16,889	17,767	17,770
% Change in Number of Registered Personnel	7.8%	5.2%	0.0%
Population (Alberta)[2]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 132	1: 131	1: 133
- Western Canada[3]	1: 123	1: 119	1: 132
- Canada[4]	1: 119	1: 115	-

---

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1981, 1982, and 1983. Excludes inactive, honourary, associate, and retired members.

[2] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The British Columbia, Saskatchewan and Alberta figures refer to nurses registered with their respective associations. The Manitoba figure refers to practicing personnel.

[4] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

III. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1982-83, there were eleven basic education programs (nine diploma nursing programs and two baccalaureate nursing programs) for registered nurses in Alberta. In addition, there were two supplementary programs in general nursing for registered psychiatric nurses, leading to registered nurse status. These programs produced a total of 609 graduates (517 diploma nurses and 92 baccalaureate nurses) in 1982-83. Table 3A lists the basic education programs and the two supplementary programs.

The two baccalaureate programs were offered at the University of Alberta and the University of Calgary. Five of the nine diploma programs were offered at community colleges. The other diploma programs were hospital based programs. Formerly there were six hospital based schools of nursing but two of these, namely, the Holy Cross Hospital School of Nursing and the Galt School of Nursing, closed after producing their last group of graduates in 1979.

In addition, there were fourteen post-basic education programs for registered nurses in Alberta. Nine of these programs lead to certificates and the other three programs lead to degrees (three post-basic baccalureate degree nursing programs for diploma nurses and two masters degree programs). In 1982-83, these programs produced a total of 288 graduates. Table 3B lists the various post-basic education programs for registered nurses.

TABLE 3A BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1980-81	1981-82	1982-83
A. DIPLOMA NURSING PROGRAMS			
Grant MacEwan Community College (Length of program: 2 years)			
Enrolments:[2]			
1st Year	76	74	91
2nd Year	48	52	81
Graduates:	42	49	71
Medicine Hat College (Length of program: 2 years)			
Enrolments:[2]			
1st Year	30	51	63
2nd Year	14	10	22
Graduates:	10	10	26
Mount Royal College (Length of program: 2 years)			
Enrolments:[2]			
1st Year	84	95	131
2nd Year	38	67	58
Graduates:	37	60	54
Red Deer College (Length of program: 2 years)			
Enrolments:[2]			
1st Year	71	64	74
2nd Year	60	60	54
Graduates:	35	44	51
Lethbridge Community College (Length of program: 2 years)			
Enrolments:[2]			
1st Year	57	48	60
2nd Year	36	40	38
Graduates:	33	33	28

TABLE 3A (cont'd)

	1980-81	1981-82	1982-83
Grande Prairie Regional College (Length of program: 88 weeks)			
Enrolments:[3]			
1st Year	-	-	21
2nd Year	-	-	-
Royal Alexandra Hospital (Length of program: 3 years)			
Enrolments:[2]			
1st Year	93	95	120
2nd Year	90	76	81
3rd Year	77	87	69
Graduates:	77	76	69
Misericordia Hospital (Length of program: 3 years)			
Enrolments:[2]			
1st Year	62	70	70
2nd Year	55	59	63
3rd Year	42	49	53
Graduates:	41	46	52
Foothills Hospital (Length of program: 3 years)			
Enrolments:[2]			
1st Year	113	129	150
2nd Year	93	77	121
3rd Year	82	92	61
Graduates:	82	92	61
University of Alberta Hospital (Length of program: 2 1/3 years)			
Enrolments:[2]			
1st Year	118	128	180
2nd Year	95	109	99
3rd Year	113	94	104
Graduates:	114	94	104
PROVINCIAL TOTAL			
Number of Diploma Programs: 9			
Graduates:	471	504	516

TABLE 3A (cont'd)

	1980-81	1981-82	1982-83
B. SUPPLEMENTARY NURSING DIPLOMA PROGRAMS (FOR REGISTERED PSYCHIATRIC NURSES)			
Grant MacEwan Community College (Length of program: 13 months)			
Enrolments:[2]			
1st Year	9	8	1
Graduates:	7	7	1
Red Deer College (Length of program: 12 months)			
Enrolments:[2]			
1st Year	11	5	0
Graduates:	9	3	0
PROVINCIAL TOTAL			
Number of Supplementary Diploma Programs: 2			
Graduates:	16	10	1
PROVINCIAL TOTAL			
Number of Diploma Nursing Programs: 11			
Graduates:	487	514	517
C. BACCALAUREATE NURSING PROGRAMS			
University of Alberta (Length of program: 4 years)			
Enrolments:[2]			
1st Year	53	60	79
2nd Year	48	50	48
3rd Year	35	48	47
4th Year	34	33	45
Graduates:	34	33	45

TABLE 3A (cont'd)

	1980-81	1981-82	1982-83
University of Calgary (Length of program: 4 years)			
Enrolments:			
1st Year	63	64	64
2nd Year	54	47	56
3rd Year	53	50	44
4th Year	29	52	47
Graduates:	28	51	47
PROVINCIAL TOTAL			
Number of Baccalaureate Programs: 2			
Graduates:	62	84	92
PROVINCIAL TOTAL			
Number of Basic Nursing Education Programs: 13			
Graduates:	549	598	609

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] These figures include both full-time and part-time students.

[3] This programme commenced in 1982-83. Therefore, there are no second year students or graduates.

TABLE 3B POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1980-81	1981-82	1982-83
A. CERTIFICATE EDUCATION PROGRAMS			
Neurosurgical Nursing			
Foothills Hospital (Length of program: 22 weeks)			
Enrolments:	6	Program No longer Offered	Program No Longer Offered
Graduates:	5		
Cardio-vascular Intensive Care Nursing			
University of Alberta Hospital (Length of program: 24 weeks)			
Enrolments:	6	7	8
Graduates:	6	6	7
Operating Room Nursing			
University of Alberta Hospital (Length of program: 24 weeks)			
Enrolments:[2]	6	8	5
Graduates:	6	8	5
Occupational Health Nursing			
Grant MacEwan Community College (Length of program: 1 year)			
Enrolments:[2]	59	51	49
Graduates:	36	20	46
Advanced Practical Obstetric Nursing			
University of Alberta (Length of program: 26 weeks)			
Enrolments:	11	10	12
Graduates:	10	6	12

TABLE 3B (cont'd)

	1980-81	1981-82	1982-83
Nurse Practitioner			
University of Alberta (Length of program: 5 months)			
Enrolments:	23	19	10
Graduates:	17	16	10
Extended Care Nursing			
Grant MacEwan Community College (Length of program: 1 year)			
Enrolments:[2]	262	186	229
Graduates:	10	0	9
Neonatal Intensive Care			
Foothills Hospital (Length of program: 5 months)			
Enrolments:	8	Program No Longer Offered	Program No Longer Offered
Graduates:	8		
Mental Health Nursing			
Mount Royal College (Length of program: 1 year)			
Enrolments:	14	23	29
Graduates:	11	8	7
PROVINCIAL TOTAL			
Number of Post-Basic Certificate Programs: 9			
Graduates:	109	64	96

TABLE 3B (cont'd)

	1980-81	1981-82	1982-83
B. **DEGREE EDUCATION PROGRAMS**			
Baccalaureate Nursing Program for Diploma Nurses			
University of Alberta (Length of program: 2 years)			
Enrolments:[2]			
1st Year	129	131	108
2nd Year	72	116	139
Graduates:	59	90	104
University of Calgary (Length of program: 2 years)			
Enrolments:[2]			
1st Year	40	50	50
2nd Year	37	32	45
Graduates:	41	30	55
University of Lethbridge (Length of program: 2 years)			
Enrolments:[2]			
1st Year	28	32	21
2nd Year[3]	-	28	24
Graduates:	-	28	23
PROVINCIAL TOTAL			
Number of Baccalaureate Nursing Programs for Diploma Nurses: 3			
Graduates:	100	148	182

TABLE 3B (cont'd)

	1980-81	1981-82	1982-83
C. GRADUATE DEGREE EDUCATION PROGRAM			
Masters of Nursing			
University of Alberta (Length of program: 2 years)			
Enrolments:			
1st Year	7	12	12
2nd Year	2	4	11
Graduates:	5	2	3
University of Calgary (Length of program: 2 years)			
Enrolments:			
1st Year	-	8	8
2nd Year	-	0	7
Graduates	-	0	7
PROVINCIAL TOTAL			
Number of Masters of Nursing Programs: 2			
Graduates:	5	2	10
PROVINCIAL TOTAL			
Number of Post-Basic Education Programs: 14			
Graduates:	214	214	288

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] The above figures include both full-time and part-time students.

[3] This program commenced in 1980-81. Therefore, there are no second year students or graduates in 1980-81.

b) Continuing Education Programs:

Continuing education courses and programs for registered nurses are available through a number of sources in Alberta.

The Bylaws of the Alberta Association of Registered Nurses state that in order to be eligible for active registration, nurses must have been employed in the practice of nursing for 150 days in the past 5 membership years or provide evidence confirming their present competency to practice. In accordance with this regulation, the Association encourages the development of refresher programs for inactive nurses who intend to re-register. All refresher programs offered in Alberta must be approved by the A.A.R.N. In 1982-83, eight institutions (Foothills Hospital, Medicine Hat College, Grant MacEwan Community College, Misericordia Hospital, Lethbridge Community College, Mount Royal College, Red Deer College, and University of Alberta Hospital) offered refresher courses in nursing. The length of these courses varied from eight to ten weeks. There were 526 students enrolled in refresher courses during the 1982-83 academic year, and there were 416 graduates.

The annual convention of the A.A.R.N. is usually held in May of each year. The Association often sponsors workshops, lectures, and seminars in conjunction with its annual convention.

The University of Alberta and the University of Calgary offered continuing education programs for nurses in various areas of the province. These programs were developed in response to the demonstrated needs of registered nurses. A number of colleges also provide continuing education programs of interest to nurses. Orientation programs, in-service programs, and other types of continuing education programs were offered by individual employing agencies. These may be in conjunction with the continuing education programs of the universities and colleges. Programs vary in length and cover a wide range of topics.

APPENDIX 1 REGISTERED NURSES BY SPECIALTY AND REGISTERED NURSE-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1983[1]

Specialty	Number of Registered Nurses	Registered Nurse-To-Population Ratio
Administrative	1,470	1: 1,603
Community/Public Health	674	1: 3,496
Emergency Room	463	1: 5,090
Home Care	366	1: 6,439
Intensive Care Units (C.C.U., I.C.U., Burn)	961	1: 2,452
Intravenous Therapy	35	1:67,329
Labor Delivery Recovery Suite	329	1: 7,163
Long Term Care/Rehabilitation	1,465	1: 1,609
Maternal/Child	640	1: 3,682
Medical, Surgical	4,129	1: 571
Nursing Education	650	1: 3,625
Occupational/Staff Health	522	1: 4,514
Operating Room	549	1: 4,292
Out Patient Services	196	1:12,022
Paediatrics	566	1: 4,163
Physicians' Offices, Medical or School Clinics	455	1: 5,179
Psychiatric	520	1: 4,532
Recovery Room	116	1:20,315
Short Stay Unit Staff	237	1: 9,943
Specialty Total	14,343	1: 164
Others	596	1: 3,954
GRAND TOTAL	14,939	1: 158

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

Note: The total number of personnel in Appendix 1 is less than the total number of personnel in Table 1. This is because Appendix 1 refers to the number of practicing personnel as of September 30, 1983, whereas Table 1 refers to the number of nurses who were registered with the Alberta Association of Registered Nurses.

REGISTERED NURSING ASSISTANTS

I. OVERVIEW

Definition: Provide nursing care for patients in hospitals, nursing homes, clinics and similar establishments. Take and record blood pressure, temperature, pulse and respiration rates. Apply dressings and administer injections, medications and treatments under supervision. Report and record observations and symptoms indicative of change in condition of patients. Assist with admission and discharge of patients. Bathe patients, make beds and assist with rehabilitation procedures. Feed and assist patients in feeding themselves. Answer call-bells and patients' or visitors' inquiries and perform other bedside services. Perform duties in operating room, outpatients and other specialized areas, if required.

(Source: No. 3134, *Canadian Classification and Dictionary of Occupations*, 1980 - Revision)

In 1977 certified nursing aides and registered nursing orderlies were re-named registered nursing assistants in accordance with the *Nursing Assistants Registration Act, 1976*.

In 1983 there were 7,355 nursing assistants registered with the Nursing Assistants Registration Board in Alberta. Of these, 4,355 registered nursing assistants were employed in Alberta in 1983.[2] About half of the registered nursing assistants were residing in the Census Metropolitan Areas of Edmonton and Calgary. The provincial registered nursing assistant-to-population ratio was 1:320 in 1983.

---

[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assistants Registration Board and residing in Alberta as of December 31, 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Professional Associations:**

Alberta Association of Registered Nursing Assistants[1]
17410 - 107 Avenue
Edmonton, Alberta
T5S 1E9

President: Ms. Roberta Metheral

Alberta Association of Registered Nursing Orderlies
9606 - 71 Avenue
Edmonton, Alberta
T6E 0W3

Executive Secretary: Mr. Paul Wolff

b) **Licensing, Registration, or Certification Authority:**

Nursing Assistants Registration Board
c/o Professions and Occupations
8th Floor, West Tower
Devonian Building
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

Chairman: Mr. J. Briggs

c) **Legislation:**

Under the authority of the Nursing Assistants Registration Act, all individuals who wish to use the title of "Registered Nursing Assistant" must register with the Nursing Assistants Registration Board, a provincial government licensing body. Annual re-registration with the Board is required of all individuals in order to continue using the title of "Registered Nursing Assistant". Membership with the Alberta Association of Registered Nursing Assistants or the Alberta Association of Registered Nursing Orderlies is voluntary.

---

[1] Formerly the Alberta Certified Nursing Aide Association.

The Nursing Assistants Registration Board sets the basic educational qualifications required for registration with the Board for nursing assistants trained outside of Alberta. The Minister of Advanced Education sets the basic educational qualifications required for registration with the Board for nursing assistants trained in Alberta.

On November 30, 1983 nursing assistants were designated under the Health Occupations Act. The Minister Responsible for Professions and Occupations will establish a health occupations committee for nursing assistants. This committee will be responsible for preparing draft regulations for this occupation to be presented to the Health Occupations Board.

III. PERSONNEL DATA

TABLE 1A NUMBER OF REGISTERED NURSING ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	185	56,900	1: 308
2 (Lethbridge)	361	115,000	1: 319
3 (Pincher Creek)	142	36,700	1: 258
4 (Hanna)	85	12,400	1: 146
5 (Drumheller)	131	39,300	1: 300
6 (Calgary)[3]	223	96,508	1: 433
7 (Stettler)	230	40,500	1: 176
8 (Red Deer)	435	129,700	1: 298
9 (Banff)	84	22,900	1: 273
10 (Camrose)	350	80,100	1: 229
11 (Edmonton)[4]	442	121,444	1: 275
12 (Fort McMurray)	207	88,500	1: 428
13 (Whitecourt)	208	55,100	1: 265
14 (Hinton)	58	26,200	1: 452
15 (Grande Prairie)	516	132,500	1: 257
Census Metropolitan Area of Edmonton	2,255	682,056[5]	1: 302
Census Metropolitan Area of Calgary	1,382	620,692[5]	1: 449
Regional Location Unknown	61		
PROVINCIAL TOTAL	7,355	2,356,500	1: 320

---

[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assistants Registration Board and residing in Alberta as of December 31, 1983.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 1B NUMBER OF REGISTERED NURSING ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1983

Community by Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	1,382	620,692	1: 449
Census Metropolitan Area Of Edmonton	2,255	682,056	1: 302
Between 10,000 and 60,000			
Airdrie	30	10,431	1: 190
Camrose	70	12,809	1: 183
Fort McMurray	34	34,494	1: 1,015
Grande Prairie	104	24,076	1: 232
Leduc	60	12,471	1: 208
Lethbridge	177	58,086	1: 328
Medicine Hat	153	41,493	1: 271
Red Deer	177	50,257	1: 284
Spruce Grove	55	11,307	1: 206
Wetaskiwin	79	10,022	1: 127
Between 5,000 and 10,000			
Brooks	49	9,421	1: 192
Drumheller	30	6,671	1: 222
Edson	29	7,329	1: 253
High River	30	5,049	1: 168
Hinton	21	8,825	1: 420
Innisfail	50	5,444	1: 109
Lacombe	24	5,954	1: 248
Lloydminster	18	9,226	1: 513
Peace River	38	6,043	1: 159
Ponoka	43	5,221	1: 121
Stettler	46	5,136	1: 112
Stony Plain	39	5,291	1: 136
Taber	25	5,988	1: 240
Vegreville	31	5,251	1: 169
Whitecourt	20	5,408	1: 270
Under 5,000	2,225	692,049	1: 314
Regional Location Unknown	61		
TOTAL	7,355	2,356,500	1: 320

[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assisants Registration Board and residing in Alberta as of December 31, 1983.

[2] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSING ASSISTANTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Registered or Practicing Personnel	3,987[1]	6,741[2]	7,355[3]
% Change in Number of Registered or Practicing Personnel[4]	-1.4%	69.1%	9.1%
Population (Alberta)[5]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1:561	1:345	1:320
- Western Canada[6]	1:415	1:365	1:362
- Canada[7]	1:303	1:305	-

[1] Source: "September 30, 1981 Survey of Major Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: Alberta Nursing Assistants Registration Board. Number of Personnel registered with the Board and residing in Alberta as of December 31, 1982.

[3] Source: Alberta Nursing Assistants Registration Board. Number of personnel registered with the Board and residing in Alberta as of December 31, 1983.

[4] Since personnel figures for 1981, 1982, and 1983 were from different sources, they are not comparable. The figure for 1981 refers to practicing personnel as opposed to the 1982 and 1983 figures which refer to registered personnel.

[5] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[6] Source: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan. The figures for British Columbia and Saskatchewan refer to personnel registered with their respective associations. The figures for Manitoba refer to active practicing personnel. The 1981 data for Alberta refer to the number of practicing personnel; and the 1982 and 1983 figures refer to personnel registered with the Nursing Assistants Registration Board.

[7] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to academic year 1978-79, the Alberta Vocational Centres in Edmonton and Calgary offered separate nursing aide and nursing orderly programs, which were 10 months in length. The curriculum content and administrative structure of the nursing aide and nursing orderly programs have been revised. Beginning in 1978-79, these programs were formally amalgamated under the new title of "Nursing Assistant Certificate Program." In 1983 there were 316 graduates from the two training programs at the Alberta Vocational Centre, Calgary and the Alberta Vocational Centre, Edmonton. The former had an outreach program at Crowsnest Pass in 1982-83. The latter had an outreach program at Alberta Vocational Centre, Grouard.

TABLE 3 BASIC EDUCATION PROGRAMS FOR NURSING ASSISTANTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Alberta Vocational Centre, Calgary (Length of program: 38 weeks)			
Enrolments[2]	162	167	185
Graduates[2]	105	106	152
Alberta Vocational Centre, Edmonton (Length of program: 1 year)			
Enrolments[3]	153	168	212
Graduates[3]	123	112	146
Alberta Vocational Centre, Grouard[4] (Length of program: 1 year)			
Enrolments	-	47	29
Graduates	-	26	18
PROVINCIAL TOTAL			
Enrolments[3]	315	382	426
Graduates[3]	228	244	316

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Services Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] Enrolment and graduate data for 1982-83 includes the figures for the outreach program at Crowsnest Pass.

[3] Enrolment and graduate data for 1982-83 includes full-time and part- time students.

[4] This program is brokered from the Alberta Vocational Centre, Edmonton.

b) Continuing Education Programs:

Both the Alberta Association of Registered Nursing Assistants and the Alberta Association of Registered Nursing Orderlies sponsored programs of continuing education for their members in 1983.

REHABILITATION PRACTITIONERS

I. OVERVIEW

Definition: Rehabilitation practitioners work in the provision of rehabilitation programs to the developmentally handicapped in a community or institutional setting. These workers are normally responsible for the delivery of established care and developmental programs based on client's needs in the areas of residential, family support, vocational, social education, recreation/leisure or developmental day care.

(Source: Government of Alberta)

Since registration with the Alberta Association of Habilitative Practitioners is not mandatory, the employer survey conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee was used as an alternative source of manpower information.

In 1983 there were 1,331 rehabilitation practitioners practicing in Alberta.[1] About 53 percent of these personnel were employed in the Census Metropolitan Areas of Edmonton and Calgary. Another 27 percent of these personnel were found in Census Division 8 where Michener Center, the province's largest institution for the developmentally handicapped, is located. The provincial rehabilitation practitioner-to-population ratio was 1:1,770 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Habilitative Practitioners
P.O. Box 887
Red Deer, Alberta
T4N 5H3

President: Ms. Joann Oakley

b) Licensing, Registration, or Certification Authority:

None

c) Legislation:

On November 30, 1983 rehabilitation practitioners were designated under the Health Occupations Act. The Minister Responsible for Professions and Occupations will establish a health occupations committee for rehabilitation practitioners. This committee will be responsible for preparing draft regulations for this occupation to be presented to the Health Occupations Board.

III. PERSONNEL DATA

TABLE 1 NUMBER OF REHABILITATION PRACTITIONERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	10	56,900	1: 5,690
2 (Lethbridge)	78	115,000	1: 1,474
3 (Pincher Creek)	0	36,700	-
4 (Hanna)	0	12,400	-
5 (Drumheller)	3	39,300	1:13,100
6 (Calgary)[3]	0	96,508	-
7 (Stettler)	6	40,500	1: 6,750
8 (Red Deer)	358	129,700	1: 362
9 (Banff)	9	22,900	1: 2,544
10 (Camrose)	20	80,100	1: 4,005
11 (Edmonton)[4]	30	121,444	1: 4,048
12 (Fort McMurray)	38	88,500	1: 2,329
13 (Whitecourt)	1	55,100	1:55,100
14 (Hinton)	6	26,200	1: 4,367
15 (Grande Prairie)	62	132,500	1: 2,137
Census Metropolitan Area of Edmonton	384	682,056[5]	1: 1,776
Census Metropolitan Area of Calgary	326	620,692[5]	1: 1,904
PROVINCIAL TOTAL	1,331	2,356,500	1: 1,770

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REHABILITATION PRACTITIONERS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	757[1]	1,125[2]	1,331[3]
% Change in Number of Practicing Personnel	52.3%	48.6%[4]	18.3%
Population (Alberta)[5]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1:2,956	1:2,065	1:1,770

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] The increase in the number of rehabilitation practitioners between 1981 and 1982 was mainly due to the more comprehensive coverage of the 1982 survey.

[5] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs

In 1982-83 there were both one-year certificate and two-year diploma programs in rehabilitation services located which were at Grant MacEwan Community College, Lethbridge Community College, Mount Royal College, and Red Deer College. As of 1983-84, only Mount Royal College will maintain its certificate program. The other institutions will only enroll students in the diploma program. In 1982-83 there were 74 graduates from the diploma programs and 78 graduates from the certificate programs.

TABLE 3 BASIC EDUCATION PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1980-81	1981-82	1982-83
CERTIFICATE AND DIPLOMA PROGRAMS IN REHABILITATIVE SERVICES			
Grant MacEwan Community College (Length of program: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	117	117	112
2nd Year	30	30	34
Graduates:			
Certificate	30	30	36
Diploma	17	19	19
Lethbridge Community College (Length of program: certificate - 1year; diploma - 2 years)			
Enrolments:[2]			
1st Year	20	24	27
2nd Year	15	11	16
Graduates:			
Certificate	15	10	0
Diploma	12	12	13

TABLE 3 (cont'd)

	1980-81	1981-82	1982-83
Mount Royal Community College (Length of program: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	33	57	51
2nd Year	12	18	19
Graduates:			
Certificate	1	-	-
Diploma	6	20	18
Red Deer College (Length of program: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	50	45	46
2nd Year	32	27	24
Graduates:			
Certificate	38	34	42
Diploma	28	25	24
PROVINCIAL TOTAL			
Number of Certificate Training Programs: 4			
Graduates:	84	74	78
Number of Diploma Training Programs: 4			
Graduates:	63	76	74

---

[1] Source: Alberta Health and Social Services Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] The figures include both full-time and part-time students.

b) Continuing Education Programs:

The Association co-sponsored a seminar for hearing impaired children in central Alberta in 1983.

RESPIRATORY TECHNOLOGISTS

I. OVERVIEW

Definition: Administer respiratory therapy to patients in hospital or at home. Discuss patient's treatment with medical and nursing staff. Set up ventilators, incubators, manual resuscitators and other life support equipment. Attach life support equipment to patient. Operate controls of equipment to adjust airway pressure, humidity, blood gas levels, respiratory rate and other factors. Monitor patient's progress and equipment function. Perform basic pulmonary function tests to assist physician in diagnosis of respiratory illnesses. Take blood sample from patient and analyze for blood gas values, if required. Explain treatment procedures and demonstrate equipment operation to patients and hospitals personnel. Perform artificial respiration and external cardiac massage, if required. Service and repair equipment and inspect all medical piping, manifolds and patient alarm system.

(Source: No. 3159, Canadian Classification and Dictionary of Occupations, 1980 - Revision)

Since registration with the Alberta Society of Respiratory Technologists is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

In 1983 there were 289 respiratory technologists practicing in Alberta.[1] About 88 percent of these personnel were employed in the Census Metropolitan Areas of Edmonton and Calgary. The provincial respiratory technologist-to-population ratio was 1:8,154 in 1983.

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Respiratory Therapy
7027 - 183 Street
Edmonton, Alberta
T5T 2V5

President: Miss Marleen Irwin

b) Licensing, Registration or Certification Authority:

None.

c) Legislation:

On June 6, 1983 respiratory technologists were designated under the Health Occupations Act. The Minister Responsible for Professions and Occupations will establish a health occupations committee for respiratory technologists. This committee will be responsible for preparing draft regulations for this occupation to be presented to the Health Occupations Board.

III. PERSONNEL DATA

TABLE 1 NUMBER OF RESPIRATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	56,900	1: 18,967
2 (Lethbridge)	12	115,000	1: 9,583
3 (Pincher Creek)	1	36,700	1: 36,700
4 (Hanna)	0	12,400	-
5 (Drumheller)	0	39,300	-
6 (Calgary)[3]	0	96,508	-
7 (Stettler)	0	40,500	-
8 (Red Deer)	7	129,700	1: 18,529
9 (Banff)	1	22,900	1: 22,900
10 (Camrose)	4	80,100	1: 20,025
11 (Edmonton)[4]	1	121,444	1:121,444
12 (Fort McMurray)	2	88,500	1: 44,250
13 (Whitecourt)	0	55,100	-
14 (Hinton)	0	26,200	-
15 (Grande Prairie)	3	132,500	1: 44,167
Census Metropolitan Area of Edmonton	149	682,056[5]	1: 4,578
Census Metropolitan Area of Calgary	106	629,692[5]	1: 5,856
PROVINCIAL TOTAL	289	2,356,500	1: 8,154

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Services Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RESPIRATORY TECHNOLOGISTS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	260[1]	288[2]	289[3]
% Change in Number of Practicing Personnel	19.8%	10.8%	0.3%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios			
- Alberta	1: 8,607	1: 8,065	1: 8,154
- Western Canada[5]	1:13,136	-	-
- Canada[6]	1:12,708	1:11,471	-

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Sources: Rollcall Update 83, Division of Health Services Research and Development, University of British Columbia, Vancouver, British Columbia, March 1984; Research and Planning Directorate, Department of Health, Winnipeg, Manitoba; Policy Research and Management Services Branch, Saskatchewan Department of Health, Regina, Saskatchewan.

[6] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ottawa, Ontario, 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer two-year training programs for respiratory technologists. In 1982-83, 43 students graduated from these two training programs.

TABLE 3 BASIC EDUCATION PROGRAMS FOR RESPIRATORY TECHNOLOGISTS IN ALBERTA[1]

	1980-81	1981-82	1982-83
Northern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:			
1st Year	36	31	44
2nd Year	25	29	30
Graduates:	26	25	26
Southern Alberta Institute of Technology (Length of program: 2 years)			
Enrolments:			
1st Year	25	28	31
2nd Year	23	24	23
Graduates:	13	18	17
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Enrolments:			
1st Year	61	59	75
2nd Year	48	53	53
Graduates:	39	43	43

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

b) Continuing Education Programs:

The Alberta Society of Respiratory Technologists sponsored two education symposiums for its members. They also hosted an annual symposium. The Edmonton chapter provided 6 mini symposiums.

SOCIAL WORKERS

I. OVERVIEW

Definition: Counsels and aids individuals and families to understand and resolve their personal and social problems:

Interviews clients with problems; such as, personal, social and family adjustments, finances, employment, and physical and mental impairments, to determine nature, extent and causes of problems. Secures information, such as social, economic, environmental, medical and psychological factors, contributing to client's situation. Evaluates information obtained and assesses client's capacities. Determines type of assistance required, counsels client regarding plans for meeting needs, and assists client to mobilize his inner capacities and environmental sources to improve social functioning. Aids client, through casework methods, to modify attitudes and patterns of behaviour by increasing understanding of himself, his problems and his part in creating them. Refers client to community agencies and other organizations and arranges for provision of appropriate assistance; such as, financial aid, employment, vocational training, medical treatment, recreational opportunities or housing. Follows progress of client after immediate problems have been overcome, and compiles case records and prepares reports. May secure supplementary information, such as employment, police or medical records, or school reports. May work in collaboration with professionals in other disciplines.

(Source: No. 2331, Canadian Classification and Dictionary Of Occupations, 1980 - Revision).

Since registration with the Alberta Association of Social Workers is not mandatory, the survey of employers conducted on September 30, 1983 by the Alberta Health and Social Services Disciplines Committee is used as an alternative source of manpower information.

In 1983 there were 2,202 practicing social workers in Alberta.[1] About 71 percent of the practicing social workers were employed in the Census

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

Metropolitan Areas of Edmonton and Calgary. The provincial social worker-to-population ratio was 1:1,070 in 1983.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Social Workers
Room #178, Edmonton Inn
11830 Kingsway Avenue
Edmonton, Alberta
T5G 0X5

President: Mr. John Hutton

b) Licensing, Registration, or Certification Authority:

Alberta Association of Social Workers
Room #178, Edmonton Inn
11830 Kingsway Avenue
Edmonton, Alberta
T5J 0X5

c) Legislation:

No legislation exists in Alberta requiring mandatory registration of all social workers practicing in the province. However, under the authority of the Social Workers Act, all individuals who wish to use the title "Registered Social Worker" must register with the Alberta Association of Social Workers (A.A.S.W.). Annual payment of fees is required to maintain registration.

Upon complaint (supported by statutory declaration) against a registered social worker, the Alberta Association of Social Workers is empowered by the Social Workers Act to investigate the complaint and, if warranted, to discipline the social worker.

The Universities Coordinating Council evaluates the academic qualifications required for registration with the A.A.S.W. as a "Registered Social Worker." A.A.S.W. sets the basic experience requirements and determines whether the person is of good character and reputation. Individuals who have a masters degree in social work, or individuals who have sufficient practical experience in social work and who have satisfactorily completed any examination assigned by the Universities Coordinating Council are eligible for membership in the A.A.S.W.

III. PERSONNEL DATA

TABLE 1 NUMBER OF SOCIAL WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1983

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	34	56,900	1: 1,674
2 (Lethbridge)	99	115,000	1: 1,162
3 (Pincher Creek)	11	36,700	1: 3,336
4 (Hanna)	4	12,400	1: 3,100
5 (Drumheller)	10	39,300	1: 3,930
6 (Calgary)[3]	18	96,508	1: 5,362
7 (Stettler)	13	40,500	1: 3,115
8 (Red Deer)	121	129,700	1: 1,072
9 (Banff)	15	22,900	1: 1,527
10 (Camrose)	35	80,100	1: 2,289
11 (Edmonton)[4]	44	121,444	1: 2,760
12 (Fort McMurray)	88	88,500	1: 1,006
13 (Whitecourt)	34	55,100	1: 1,621
14 (Hinton)	13	26,200	1: 2,015
15 (Grande Prairie)	101	132,500	1: 1,312
Census Metropolitan Area of Edmonton	803	682,056[5]	1: 849
Census Metropolitan Area of Calgary	759	620,692[5]	1: 818
PROVINCIAL TOTAL	2,202	2,356,500	1: 1,070

---

[1] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[2] Source: "1983 Population Projections for Census Divisions," Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics," Municipal Services Branch, Municipal Affairs, Edmonton, Alberta, 1983.

TABLE 2 SELECTED MANPOWER STATISTICS FOR SOCIAL WORKERS IN ALBERTA, 1981, 1982, AND 1983

	1981	1982	1983
Number of Practicing Personnel	1,757[1]	2,062[2]	2,202[3]
% Change in Number of Practicing Personnel	12.2%	17.4%	6.8%
Population (Alberta)[4]	2,237,724	2,322,690	2,356,500
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1: 1,274	1: 1,126	1: 1,070
- Canada[5]	1: 3,534	1: 3,005	-

[1] Source: "September 30, 1981 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, June 1982.

[2] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1983.

[3] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel," Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta, March 1984.

[4] Source: Alberta Statistical Review, Fourth Quarter, 1983, Alberta Bureau of Statistics, Edmonton, Alberta, 1983.

[5] Source: Canada Health Manpower Inventory, 1983, Health Information Division, Health and Welfare Canada, Ontario, 1984. The figures refer to population per member of professional associations of social workers.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Calgary offers both a four-year Bachelor of Social Work (B.S.W.) program and a one- or two-year Masters of Social Work (M.S.W.) program. In 1982-83, there were 137 graduates from the B.S.W. program. The M.S.W. program had 21 graduates in 1982-83.

Satellite programs of the Faculty of Social Welfare, University of Calgary are located in Edmonton on the University of Alberta campus and in Lethbridge on the University of Lethbridge campus. The Edmonton Division offers a full range of courses at the first professional degree (B.S.W.) level whereas a partial range of B.S.W. courses are available in Lethbridge. Social work courses are also provided in Peace River, Grande Prairie, St. Paul, Medicine Hat, Drumheller, and Red Deer through tele-conferencing.

In addition to university level training, two-year programs leading to a diploma in social services are available at Red Deer College, Grant MacEwan Community College, and Mount Royal College. In 1982-83 there were 93 graduates from these programs.

TABLE 3

BASIC EDUCATION PROGRAMS FOR SOCIAL WORKERS IN ALBERTA[1]

		1980-81	1981-82	1982-83
A.	**BACCALAUREATE PROGRAM**			
	University of Calgary Bachelor of Social Work (B.S.W.) (Length of program: 4 years)			
	Enrolments:[2]			
	1st Year	34	41	23
	2nd Year	87	81	81
	3rd Year	154	195	185
	4th Year	139	152	142
	Graduates:	115	127	137
B.	**MASTERS PROGRAM**			
	University of Calgary Masters of Social Work (M.S.W.) (Length of program: 1 - 2 years)[3]			
	Enrolments:[4]			
	1st Year	58	52	34
	2nd Year	-	-	-
	Graduates:	13	16	21
C.	**SOCIAL SERVICE DIPLOMA PROGRAMS**			
	Red Deer College (Length of program: 2 years)			
	Enrolments:[5]			
	1st Year	24	25	25
	2nd Year	20	23	23
	Graduates:	18	23	20
	Grant MacEwan Community College[6] (Length of program: 2 years)			
	Enrolments:[5]			
	1st Year	57	82	106
	2nd Year	57	60	58
	Graduates:	46	57	37

TABLE 3 (cont'd)

	1980-81	1981-82	1982-83
Mount Royal College (Length of program: 2 years)			
Enrolments:[5]			
1st Year	-	120	157
2nd Year	72	17	53
Graduates:	29	34	36
PROVINCIAL TOTAL			
Number of Diploma Training Programs: 3[5]			
Enrolments:			
1st Year	117	227	288
2nd Year	149	100	134
Graduates:	93	114	93

[1] Source: Alberta Health and Social Service Training Program Inventory, 1982-83, Health and Social Service Programs Branch, Alberta Advanced Education, Edmonton, Alberta, December 1983.

[2] The enrolment figures include both full-time and part-time students. In 1982-83, there were 305 full-time students and 126 part-time students enrolled in the B.S.W. program. The Faculty of Social Welfare admits students from other faculties into the third year of the B.S.W. program. This accounts for the discrepancy between the enrollment figures for the second year and the third year of the program.

[3] The M.S.W. Program is one year in length following a B.S.W. Degree. Students with an undergraduate degree other than a B.S.W. Degree may be admitted to a two-year program.

[4] The enrolment figures include both full-time and part-time students. There were 24 full-time students and 10 part-time students enrolled in the M.S.W. program in 1982-83.

[5] Enrolment figures include both full-time and part-time students. In 1980-81 there were 224 full-time students and 6 part-time students in the three colleges. In 1981-82 there were 251 full-time students and 76 part-time students. In 1982-83 there were 324 full-time students and 98 part-time students.

[6] As of 1982-83, outreach students have been included in the first year data.

b) Continuing Education Programs:

The Faculty of Social Welfare and the Faculty of Continuing Education at the University of Calgary provided continuing professional education in social work in various parts of the province to ensure that new approaches, research, and knowledge were made available to practicing social workers.

Continuing professional education programs were also offered by the Alberta Association of Social Workers. The Association also holds an annual two-day conference.